**FIG. 1**

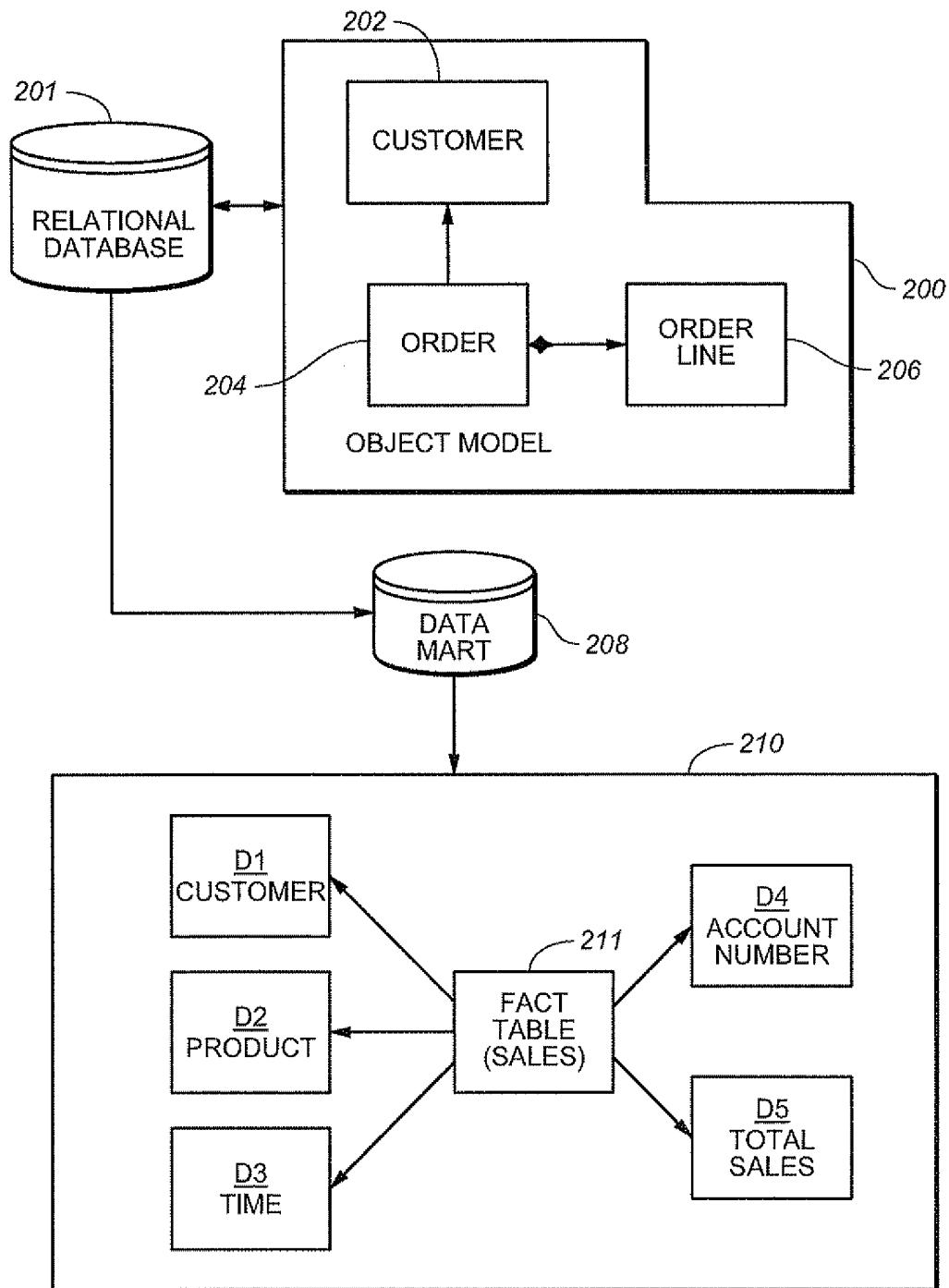
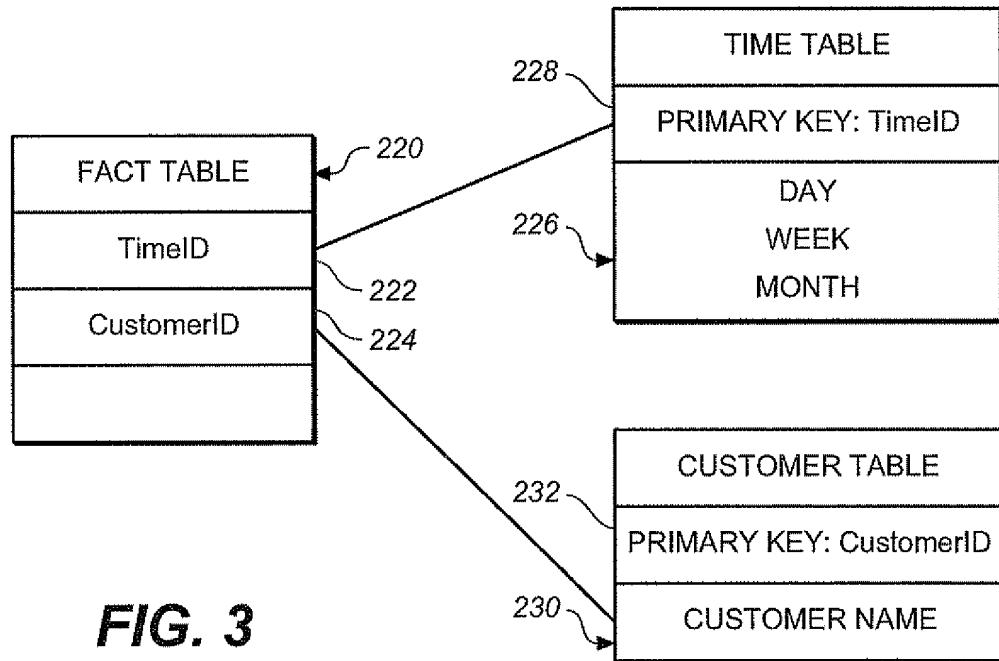


FIG. 2
(PRIOR ART)

**FIG. 3**

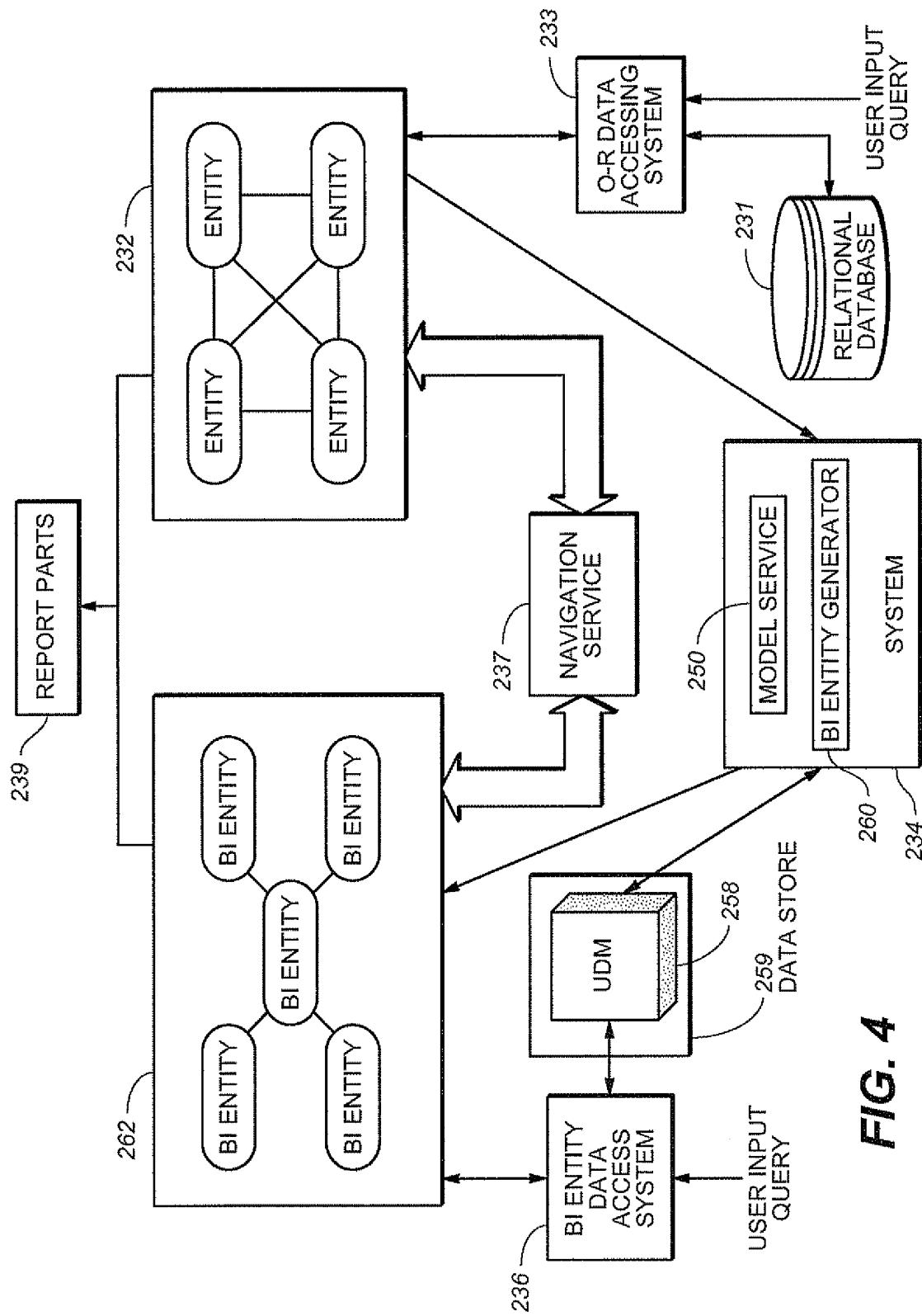
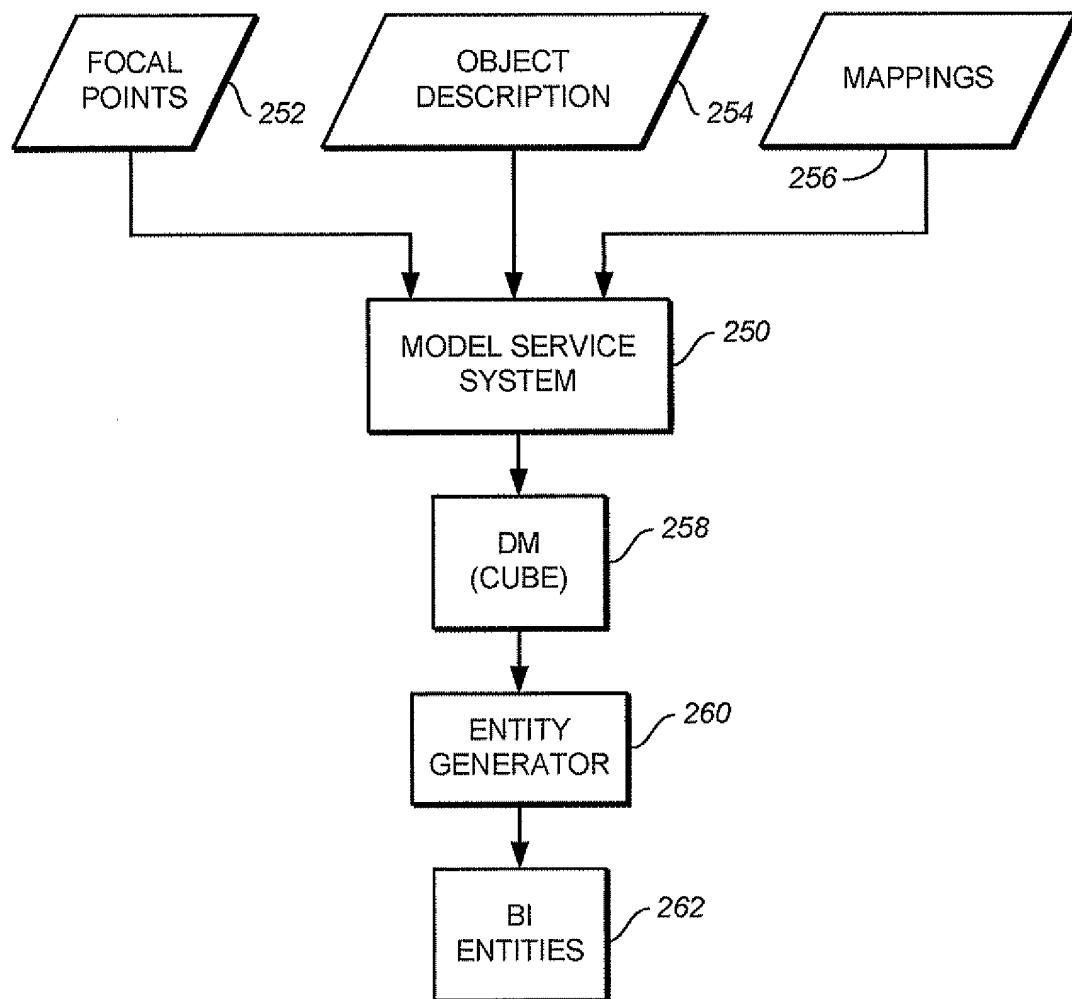
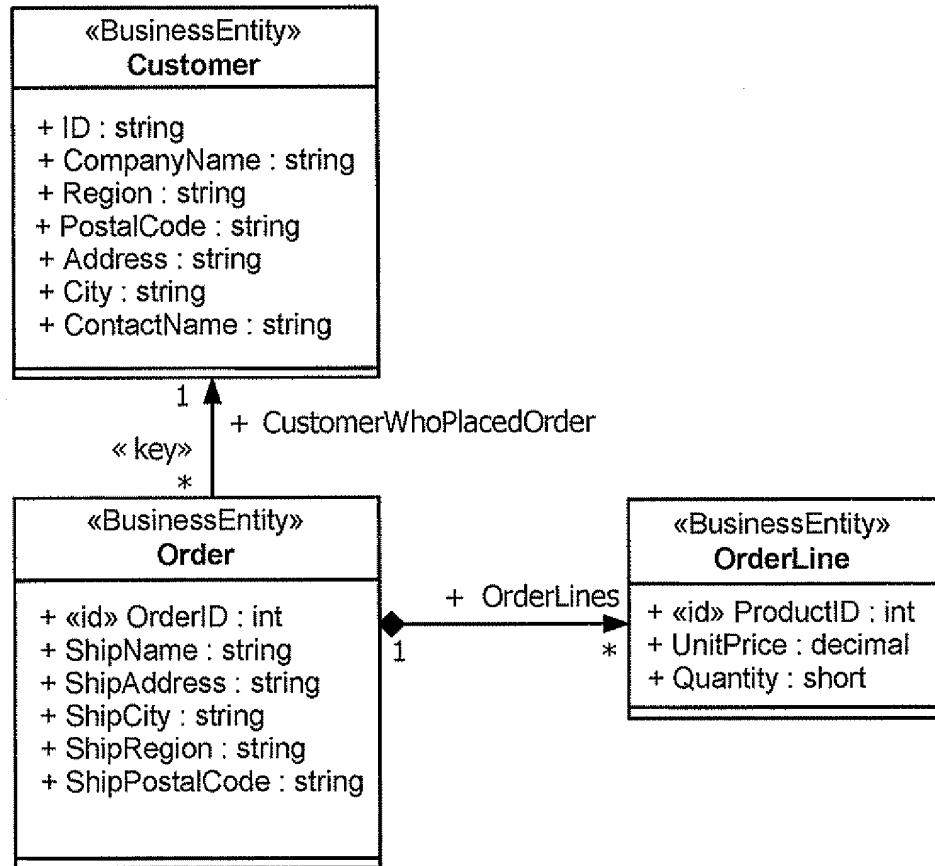
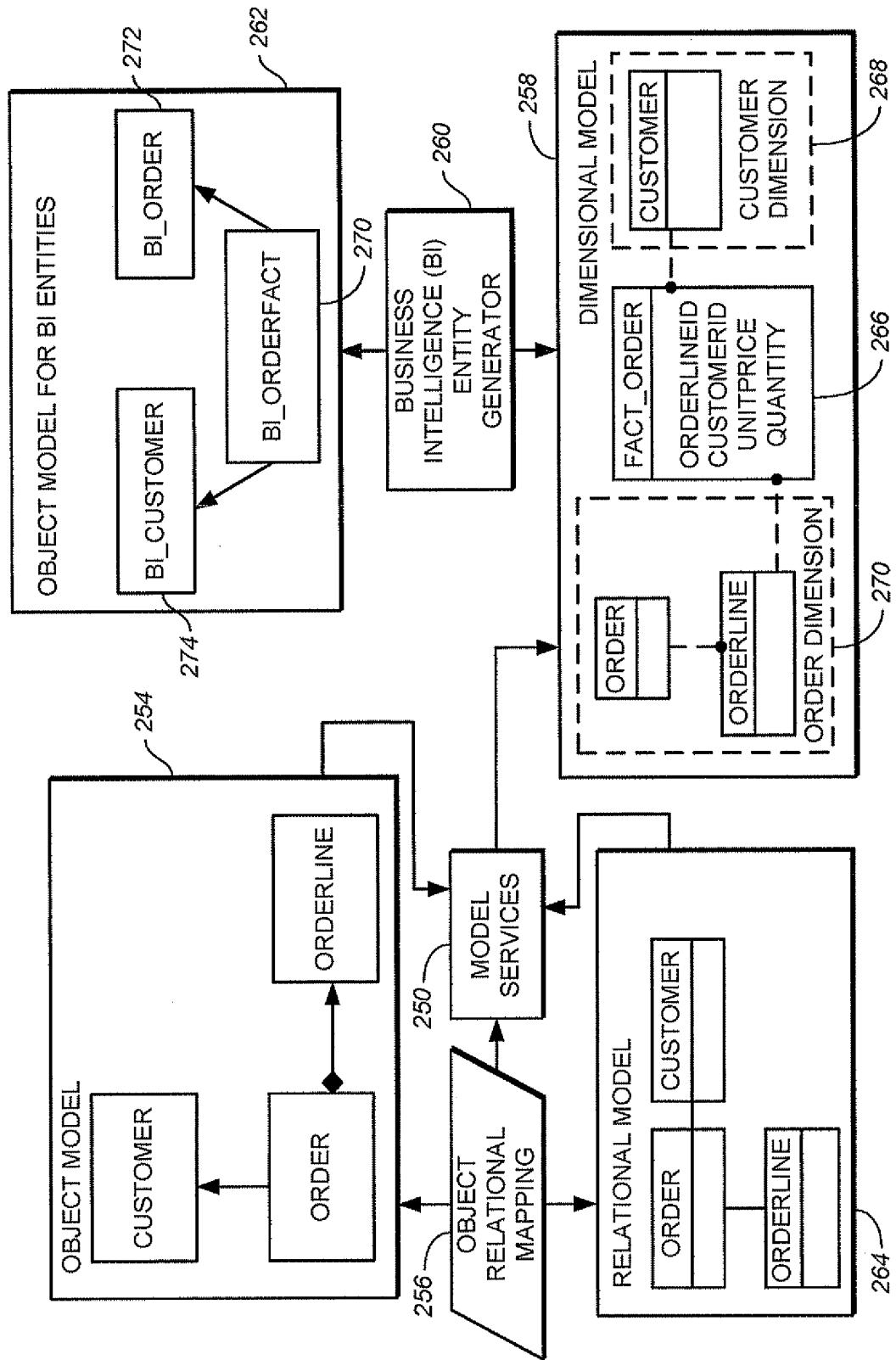
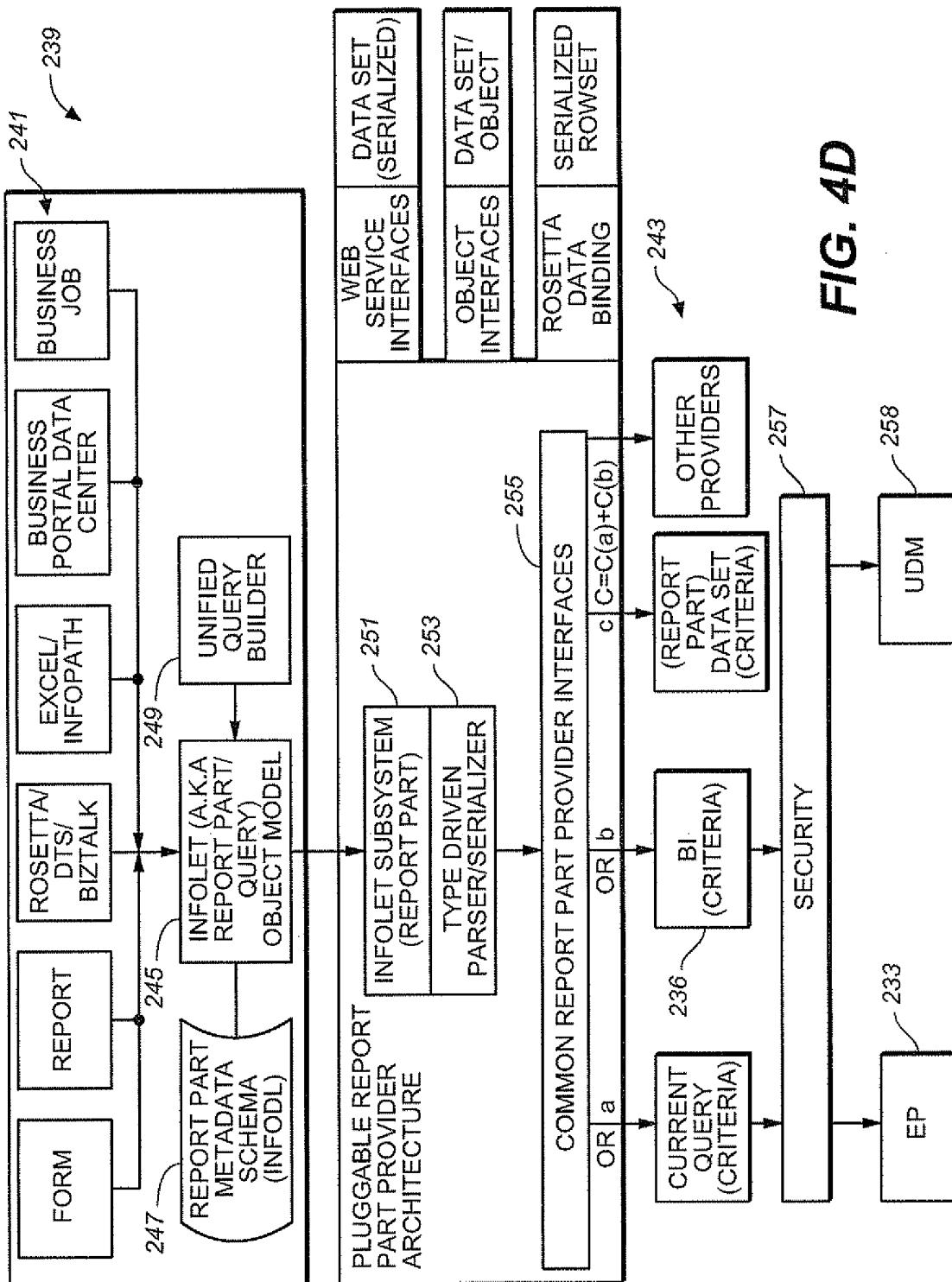


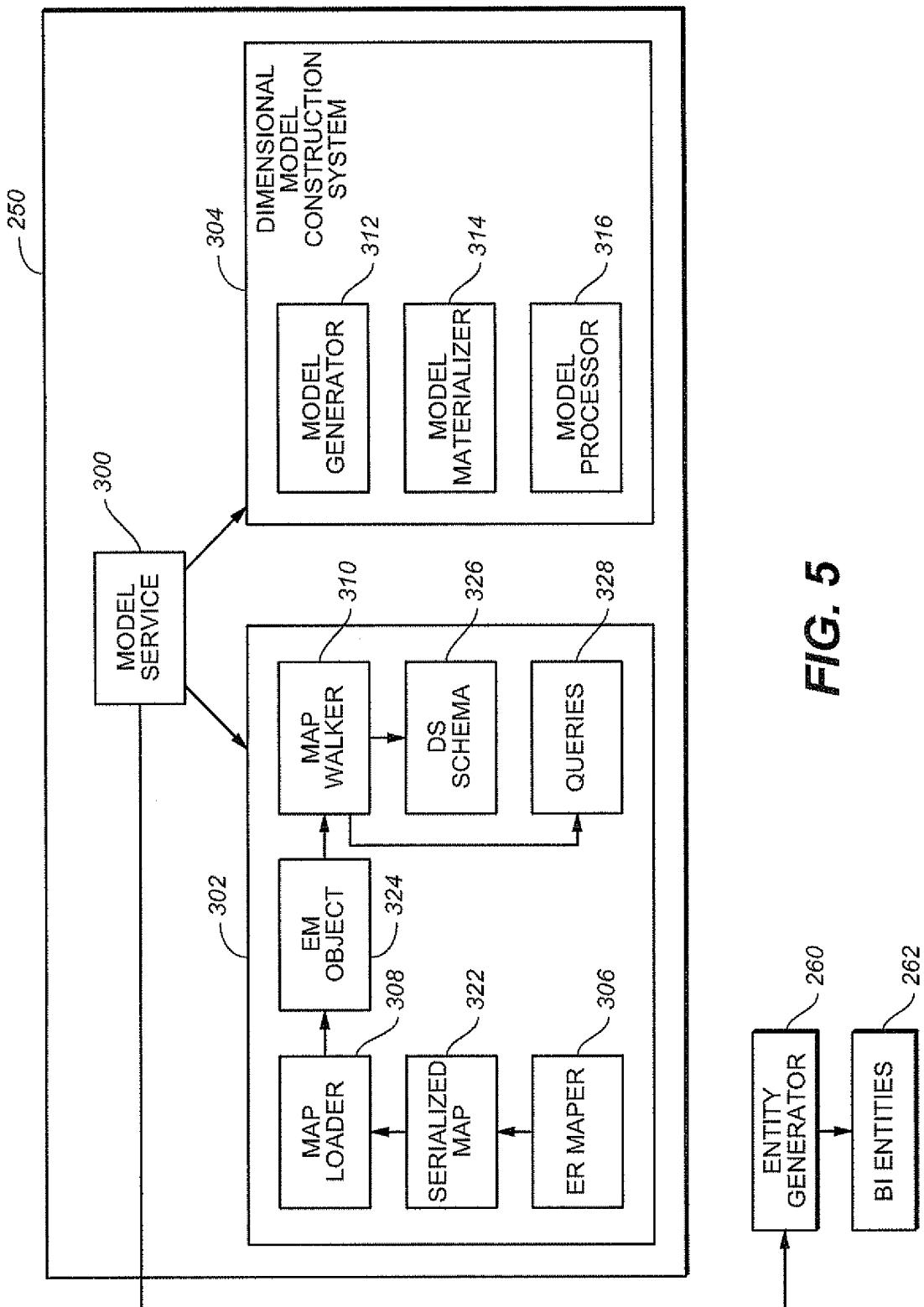
FIG. 4

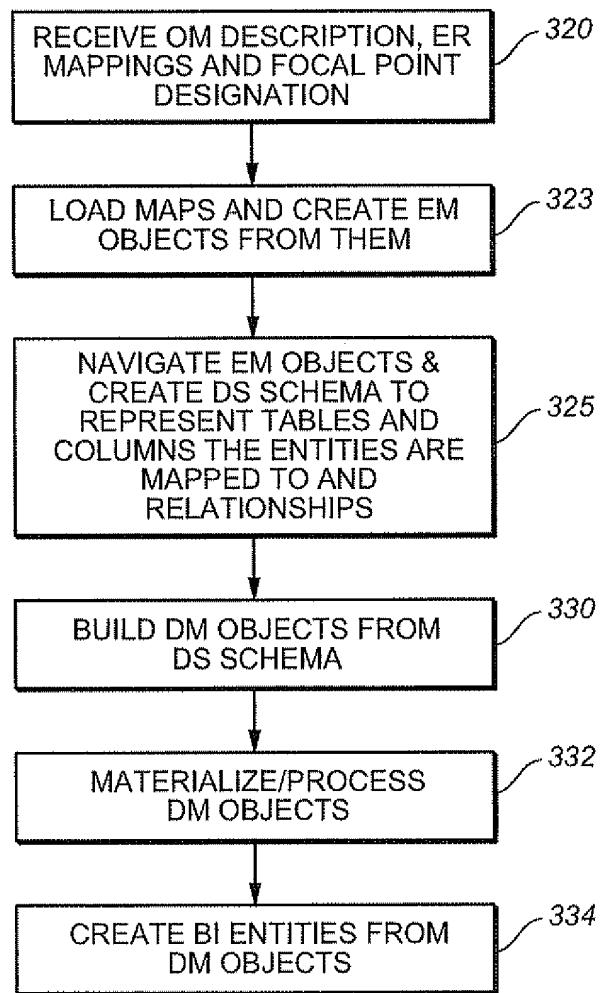
**FIG. 4A**

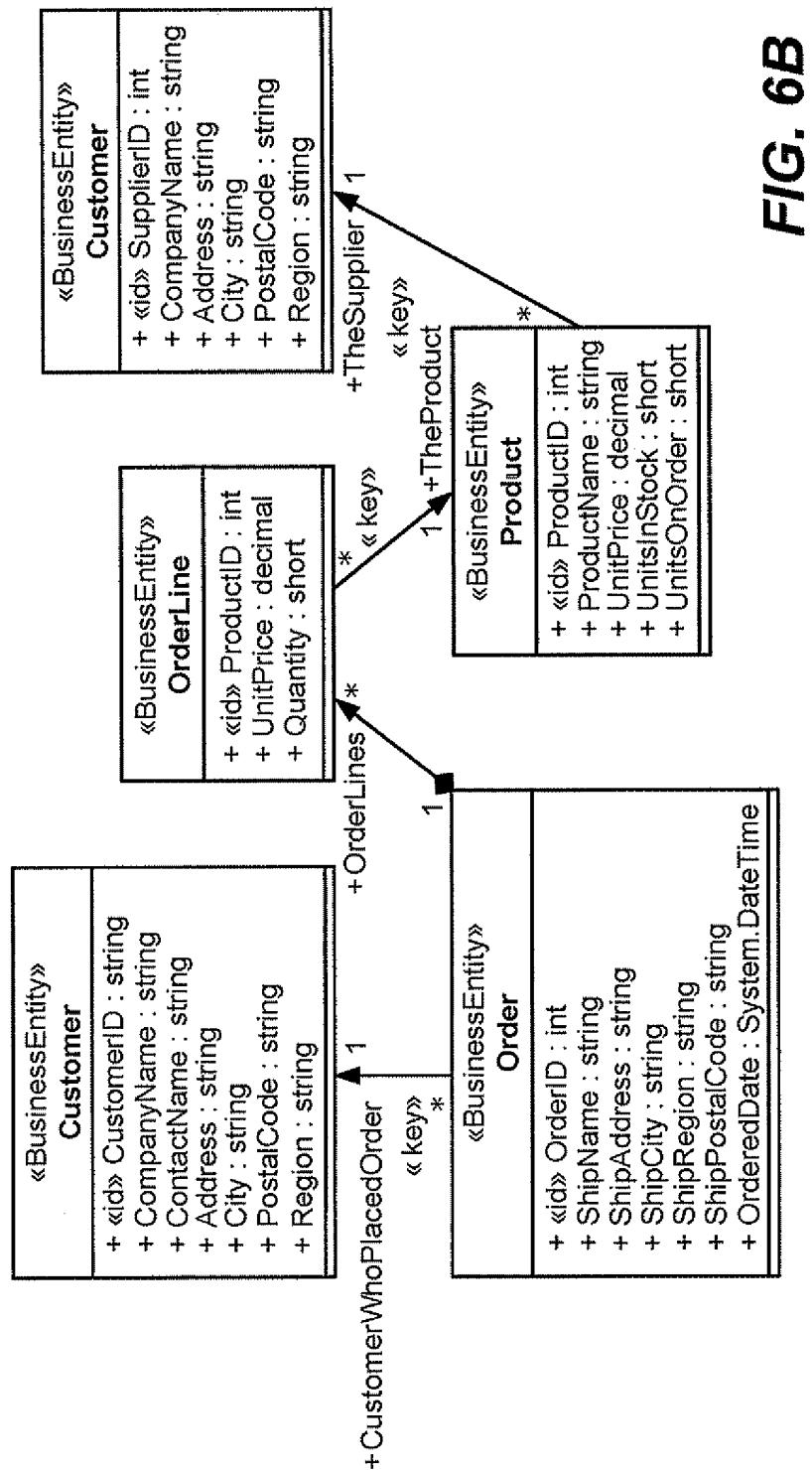
**FIG. 4B**

**FIG. 4C**

**FIG. 4D**



**FIG. 6A**



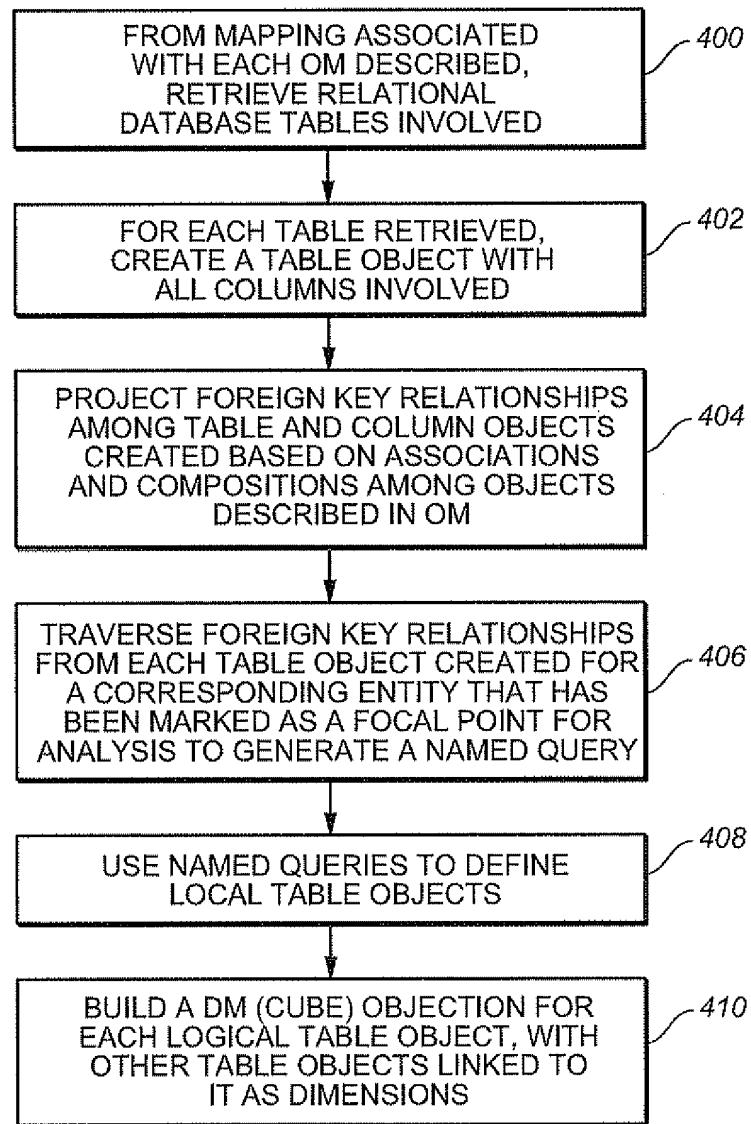
**FIG. 7**

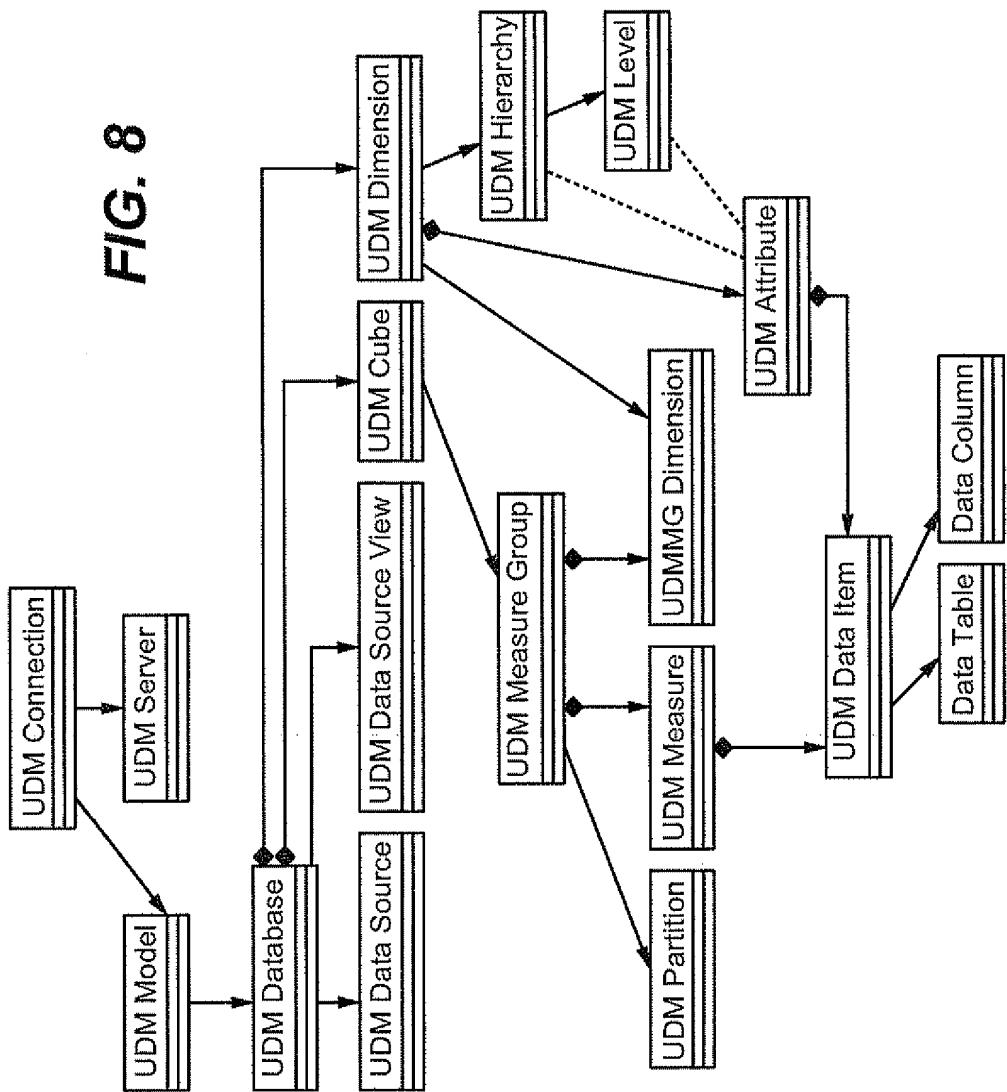
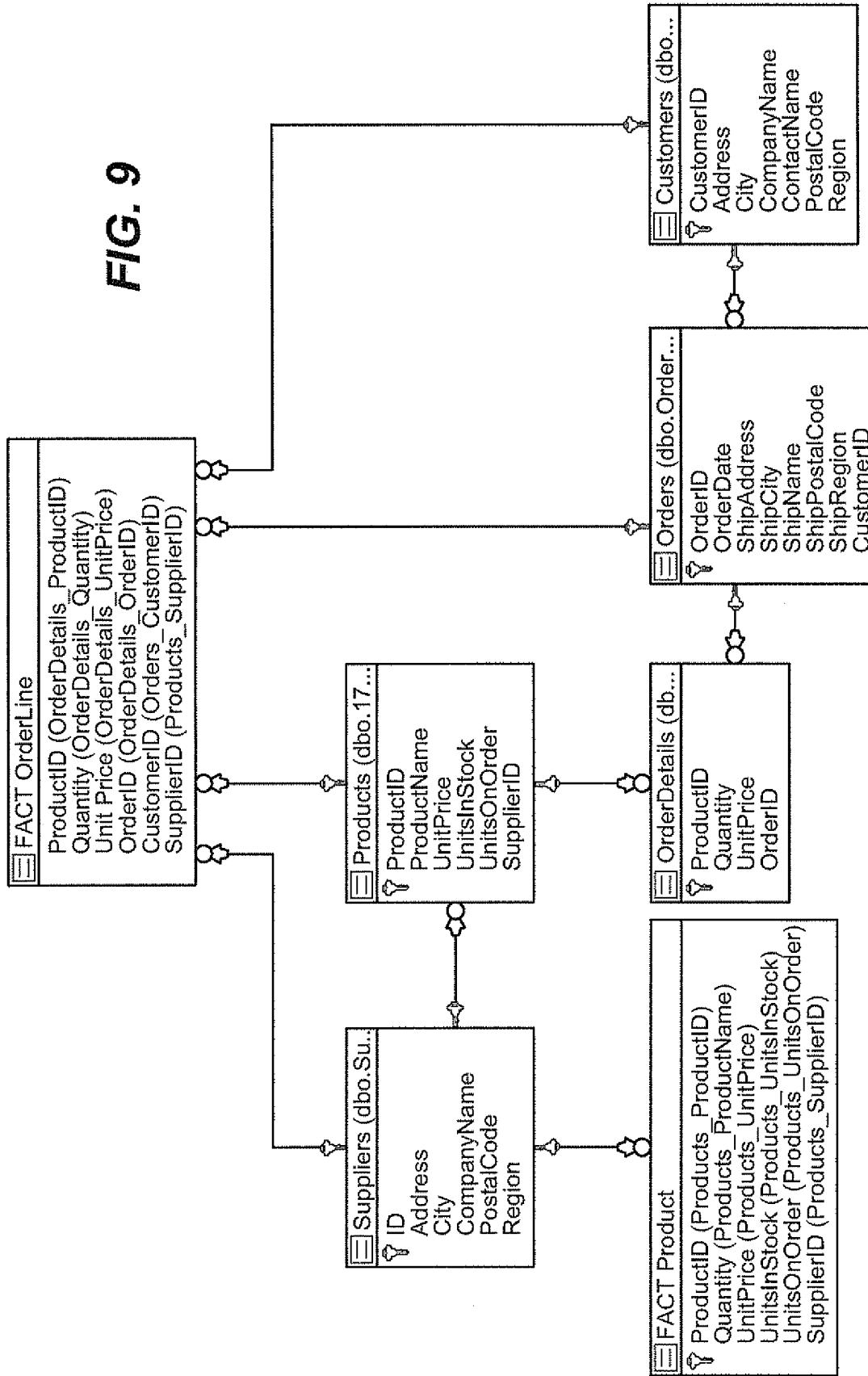
FIG. 8

FIG. 9



MDX Sample Application - mdxq1 MDX

File Edit Query View Help

DB: MBF Database

select [Measures]&{FACT_OrderLine, OrderLine_Quantity} on columns,
crossjoin([Customer],[City],[Members],[Supplier],[City_Members]) on rows
from [Microsoft_EntityTests]

Cube: Microsoft_EntityTests

Syntax Examples

	FACT_OrderLine_OrderLine
All	51096
Ann Arbor	1436
Amnacy	3073
Bend	1573
Berlin	1436
Boston	2084
Cuxhaven	612
Frankfurt	4072
Goteborg	928
Lappeenranta	1736
London	2213
Lyndby	1056
Manchester	2951
Melbourne	3937
Montceau	534
Montreal	1658
New Orleans	1735
Osaka	1211
Oviedo	1050
Paris	1416
Ravenna	2500
Saemo	1682
Sandykra	2326
Sao Paulo	1125
Singapore	1878
Site Hyacinthe	1686
Stockholm	1223
Sydney	2108
Tokio	1134
Zaandam	623
All	160
Aathen	Ann Arbor

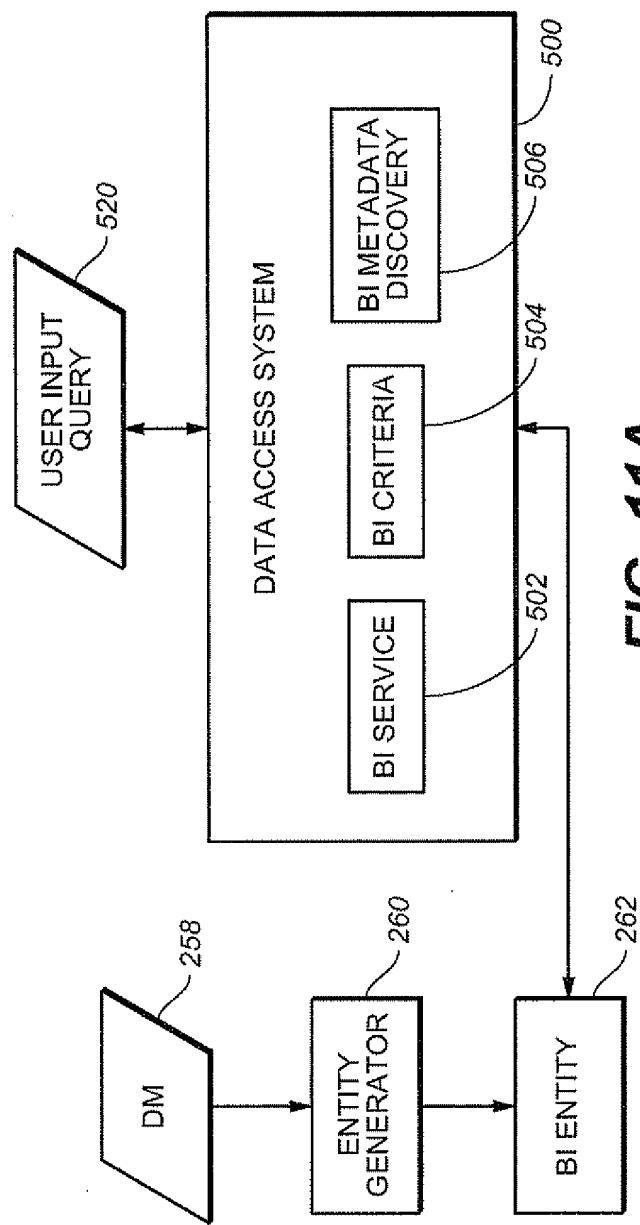
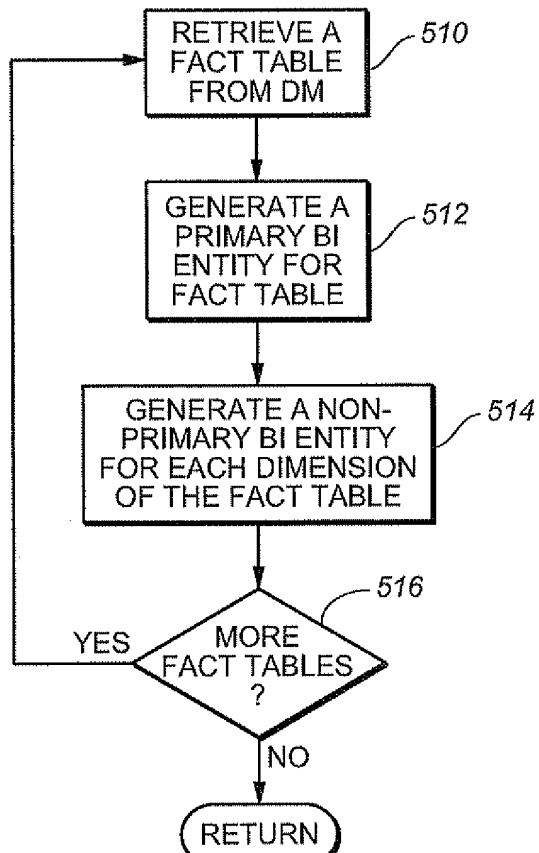


FIG. 11A

**FIG. 11B**

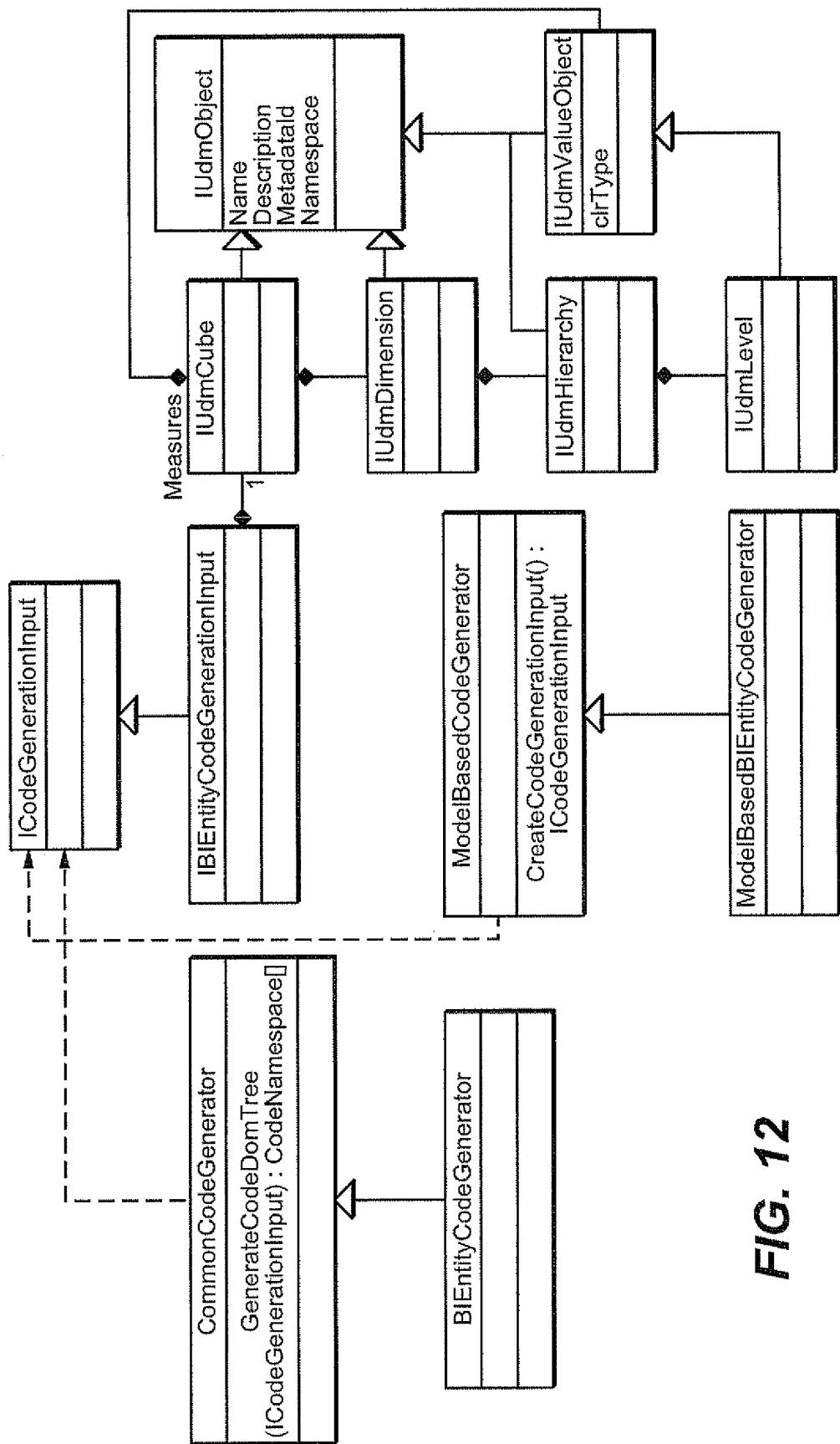


FIG. 12

```

public interface ICodeGenerator
{
    /// <summary>
    /// The method returns a GeneratedCodeWithWritableAreaPositions.
    /// </summary>
    /// <param name="input">ICodeGenerationInput defines the data needed for cod-
    generation.</param>
    /// <returns>The GeneratedCodeWithWritablePositions.</returns>
    GeneratedCodeWithWritableAreaPositions
    GeneratedCode(ICodeGenerationInput input);
}

public interface IModelBasedCodeGenerator
{
    /// <summary>
    /// The method reads the store and creates the ICodeGenerationInput needed for
    code generation.
    /// </summary>
    /// <returns></returns>
    ICodeGenerationInput CreateCodeGenerationInput();
}

```

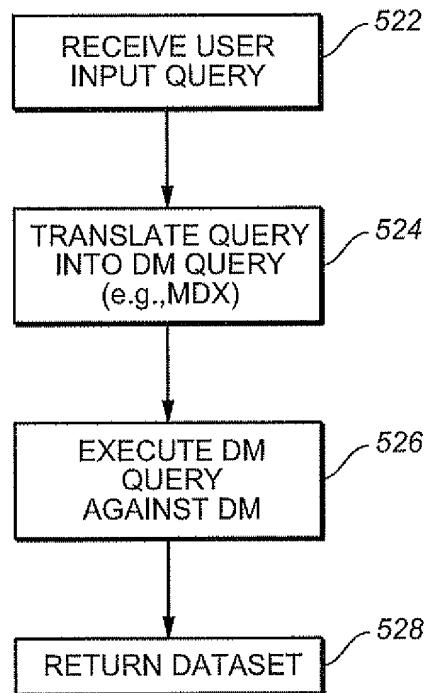
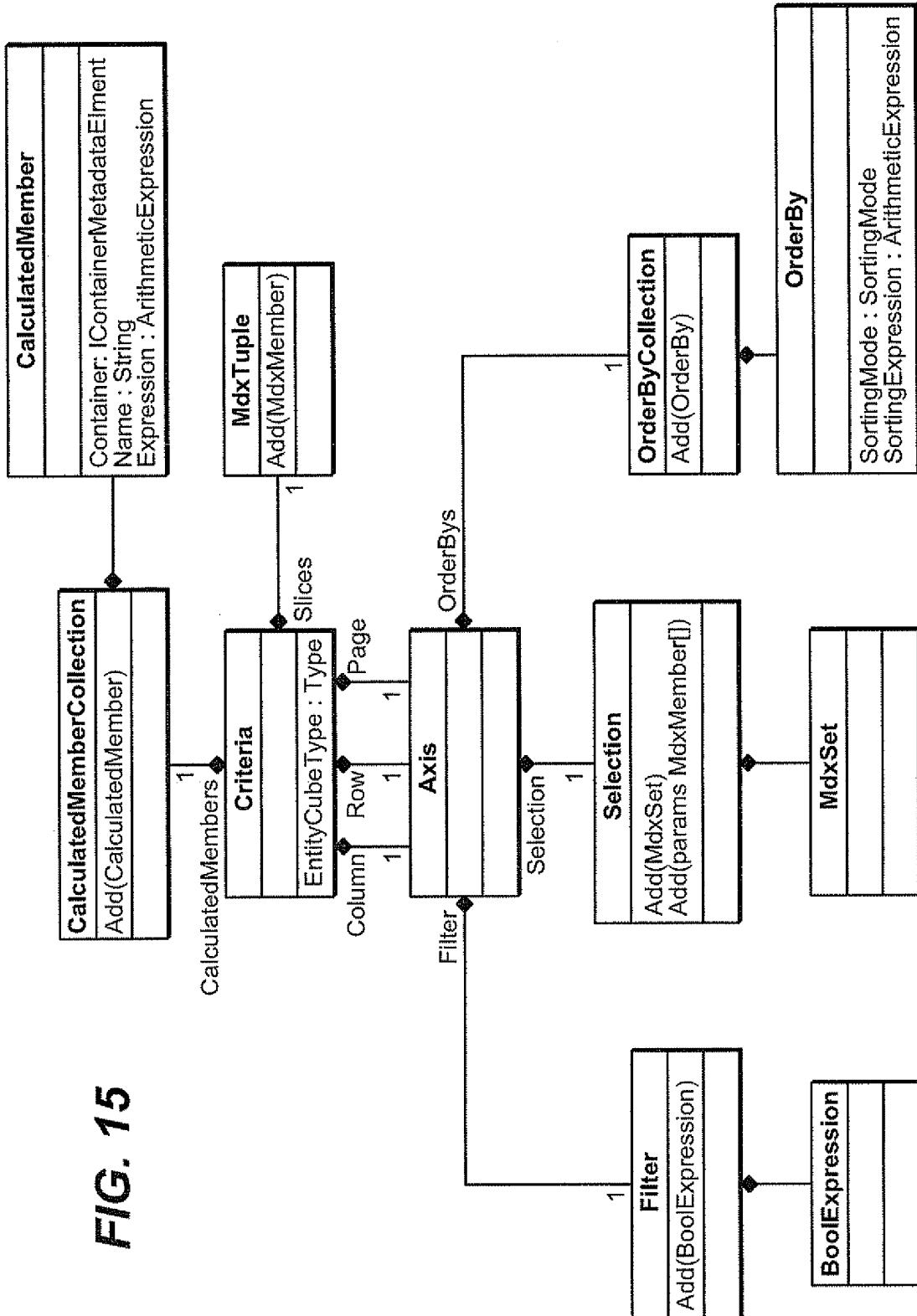
FIG. 13**FIG. 14**

FIG. 15



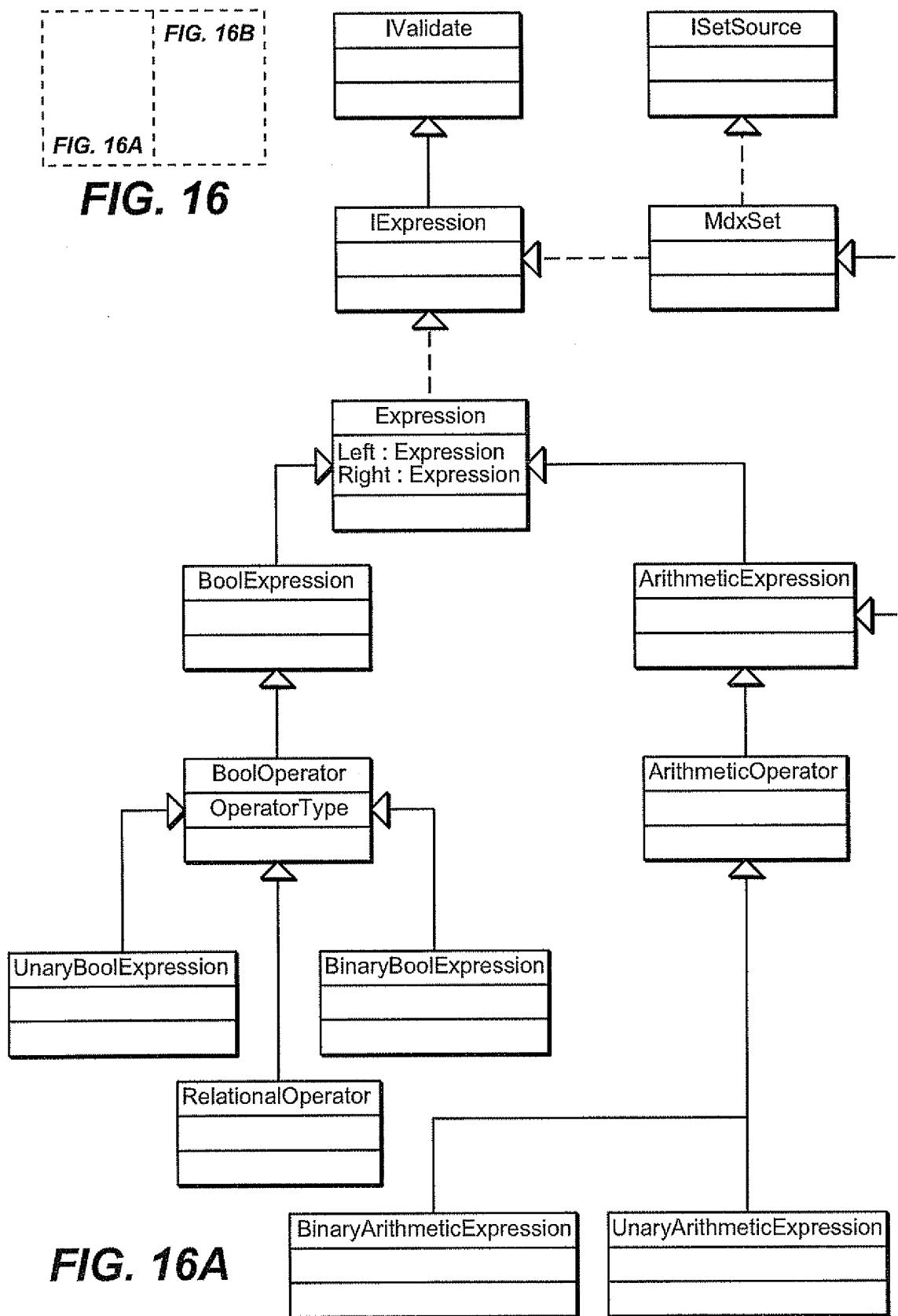
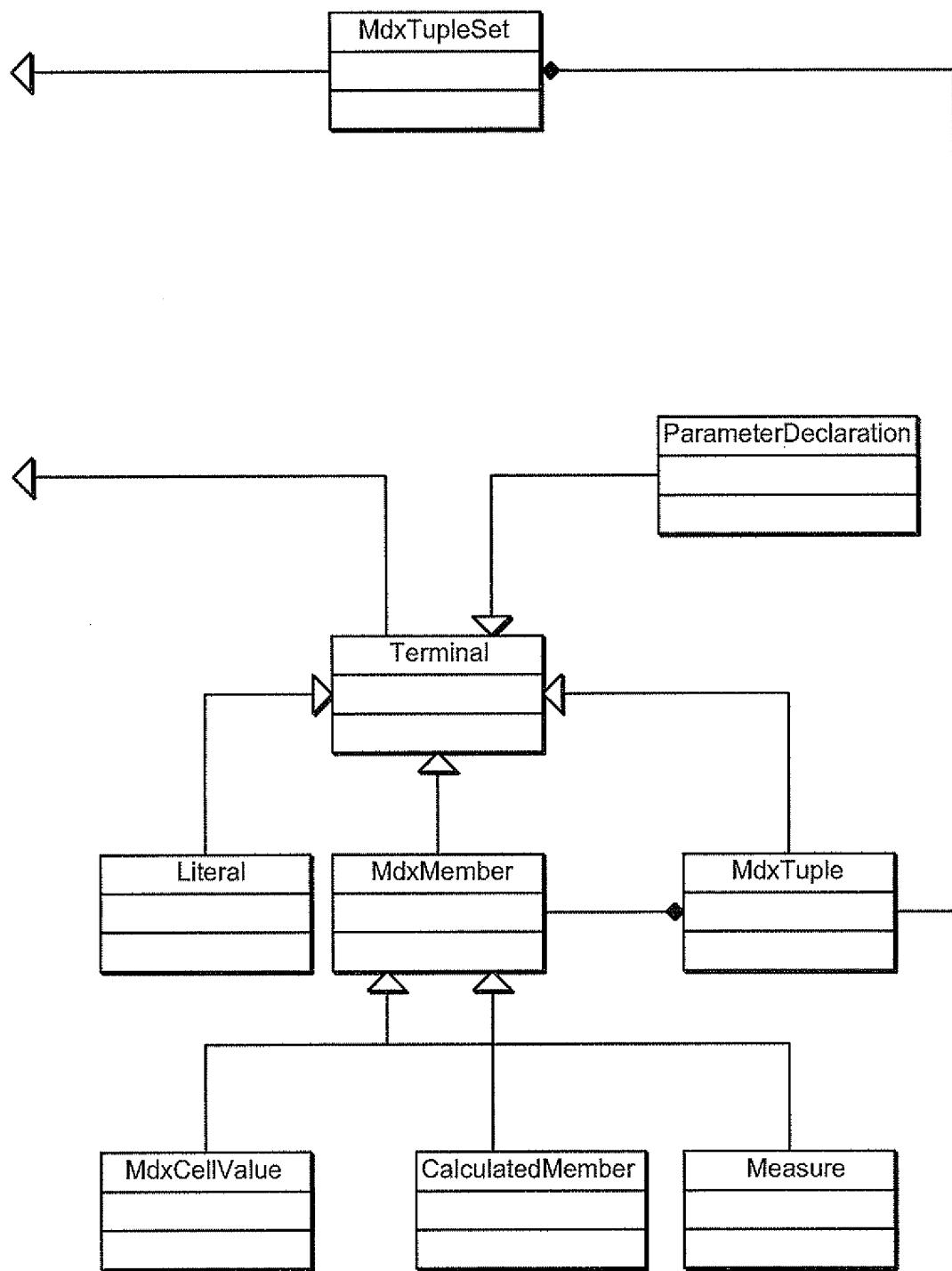
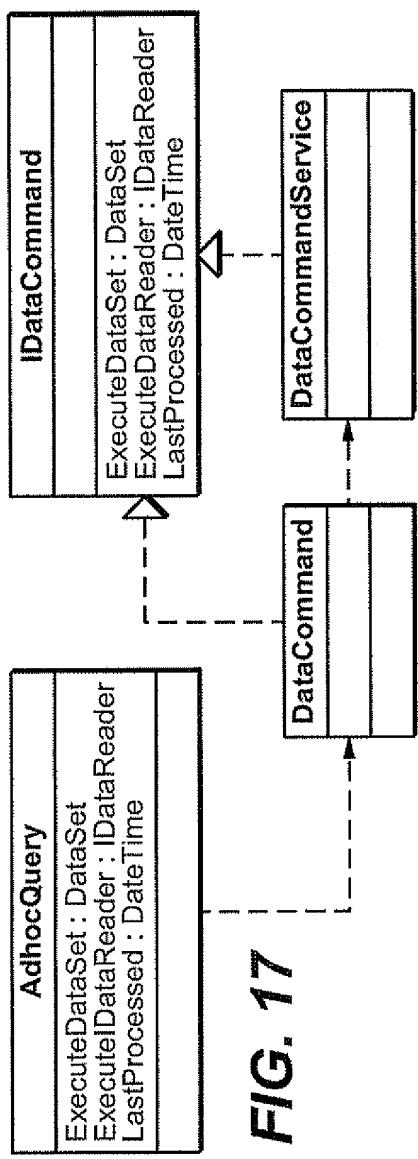


FIG. 16B

**FIG. 18**

Form1

Order	OrderedDate	MemberCaption	Measures	FACT	Product	Product_UnitsInStock	Measures	FACT	OrderLine	OrderLine_UnitsP
All	1996-07-04 00:00:00		3119	(null)			56424.86			
	1996-07-05 00:00:00			(null)			58.6			
	1996-07-08 00:00:00			(null)			61			
	1996-07-09 00:00:00			(null)			100.5			
	1996-07-10 00:00:00			(null)			94			
	1996-07-11 00:00:00			(null)			40.4			
	1996-07-12 00:00:00			(null)			30.8			
	1996-07-13 00:00:00			(null)			88.3			
	1996-07-15 00:00:00			(null)			36.6			
	1996-07-16 00:00:00			(null)			59.9			
	1996-07-17 00:00:00			(null)			57.8			
	1996-07-18 00:00:00			(null)			28.8			
	1996-07-19 00:00:00			(null)			97.1			

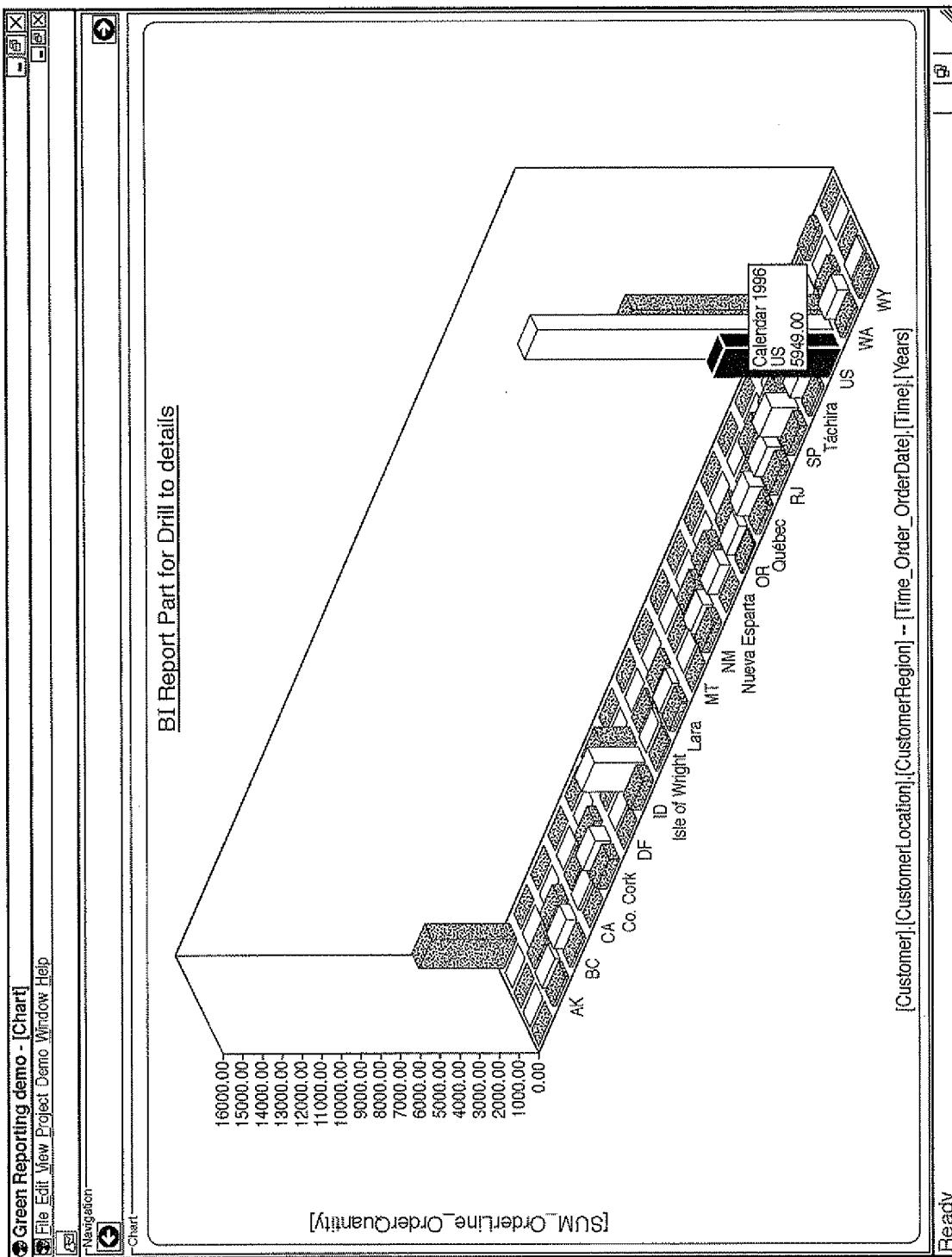


FIG. 19

Green Reporting demo - [Chart]

File Edit View Project Demo Window Help

Navigator

Chart

Microsoft Entity/less, Customer	Customer/Region	Customer/Name	Customer/City	Customer/ID
US	Maria Andress	Ernest	ALFKI	
US	Aria Trujillo	Marcos D.F.	ANATR	
US	Antonio Moreno	Mexico D.F.	ANTON	
US	Thomas Hardy	London	AROUT	
US	Christina Berglund	Luleå	BERGS	
US	Hanna Moos	Mannheim	BLAUS	
US	Friedrich Cileaux	Strasbourg	BLÖNF	
US	Martin Sommer	Madrid	BOLID	
US	Lawrence Lebihan	Marseille	BONAP	
US	Victoria Ashworth	London	BOSEV	
US	Patricia Serrano	Buenos Aires	CACIU	
US	Francisco Chang	México D.F.	CENIC	
US	Yang Wang	Beijing	CHOIS	
US	Elizabeth Brown	London	CONSH	
US	Sven Ottieb	Aachen	DRACD	
US	Jeanne Lautrôle	Nantes	DUMON	
US	Ann Devon	London	EARSTC	
US	Rotarien Mandel	Graz	ERINSH	
US	Diego Roel	Hamburg	FISSA	
US	Marine Banqué	Lille	FOILG	
US	Maria Larsson	Bräcke	FOILKO	
US	Peter Franken	München	FRANK	
US	Carina Schmitz	Nantes	FRANR	
US	Paolo Accorti	Torino	FRANS	
US	Lino Rodriguez	Lisboa	FURIB	
US	Eduardo Saverio	Barcelona	GALED	
US	José Pedro Freyre	Sevilla	GODOS	
US	Philip Cramer	Brandenburg	KOENE	
US	Daniel Tonini	Versailles	LACOR	
US	Annette Rödel	Toulouse	LAMAI	
US	Renate Messner	Frankfurt a.M.	LEHMS	
US	Giovanni Rovelli	Segano	MAGNA	
US	Catherine Davy	Bruxelles	MASD	
US	Alexander Feuer	Léipzig	MORGK	
US	Simon Crowther	London	NORIS	
US	Yvonne Moncada	Saintos Aires	OCEAN	
US	Hermine Phälsheim	Köln	OTTIK	
US	Marie Bertrand	Paris	PARIS	
US	Guillermo Fernández	México D.F.	PERIC	
US	Gaetano Pipps	Székeszé	PICCO	
US	Isabell de Castro	Lisboa	PRINI	
US	Hans Koss	Copenhagen	QUICK	
US	Sergio Gutiérrez	Buenos Aires	RANCH	
US	Mauricio Moncini	Negro Emilia	REGGC	
US	Michael Holz	Genève	RICSU	
US	Alejandra Camino	Malmö	ROMEY	

Ready

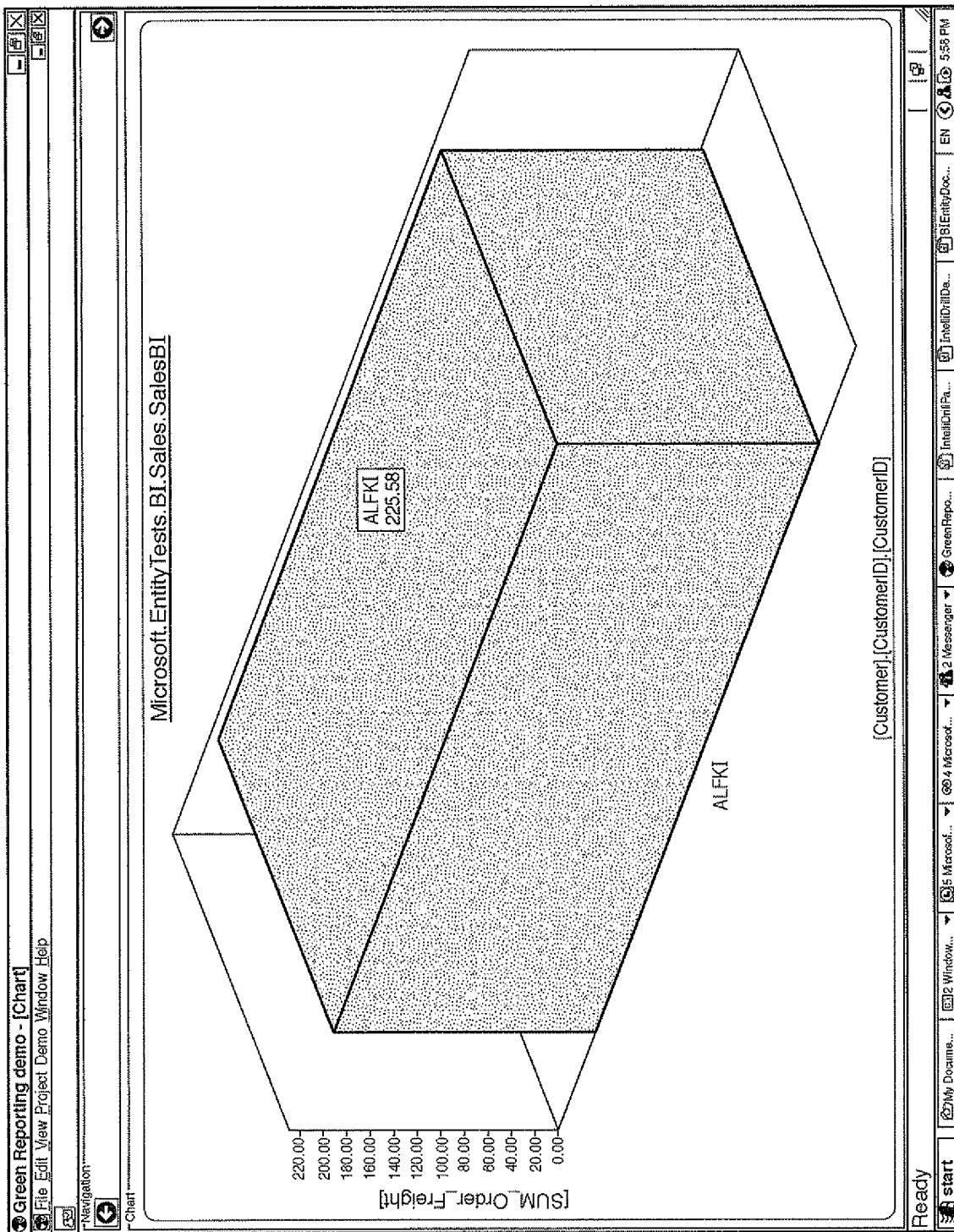


FIG. 21

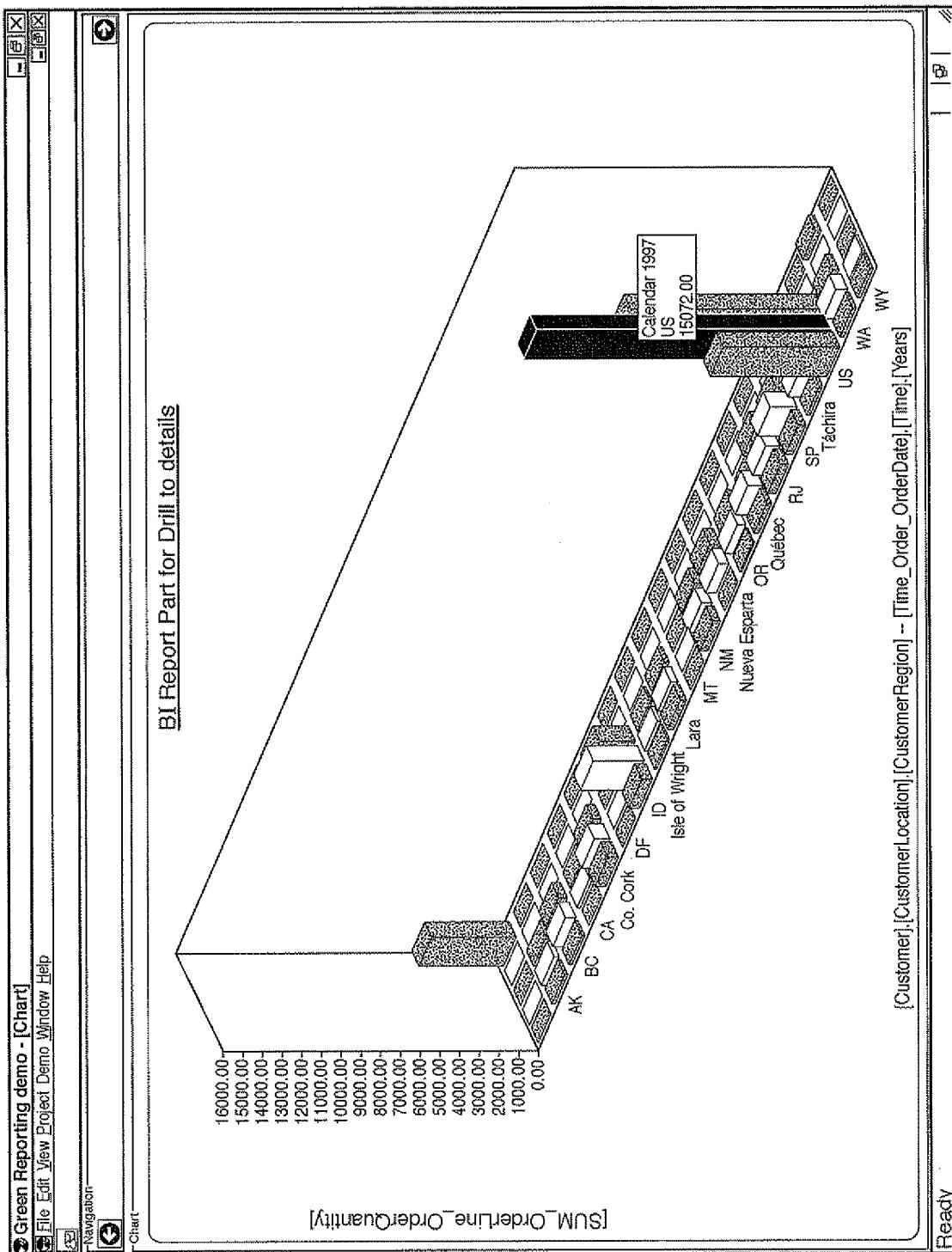


FIG. 22

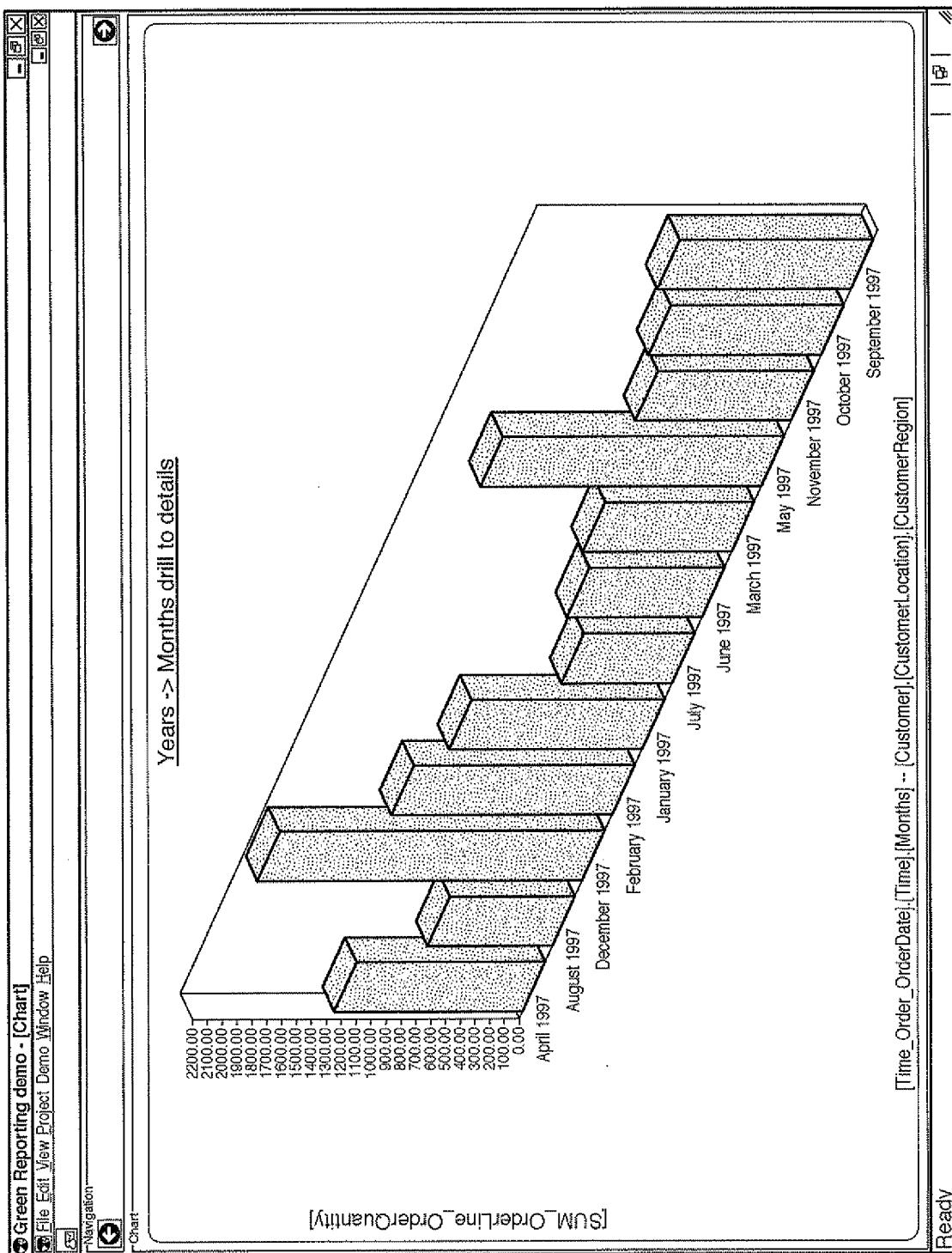
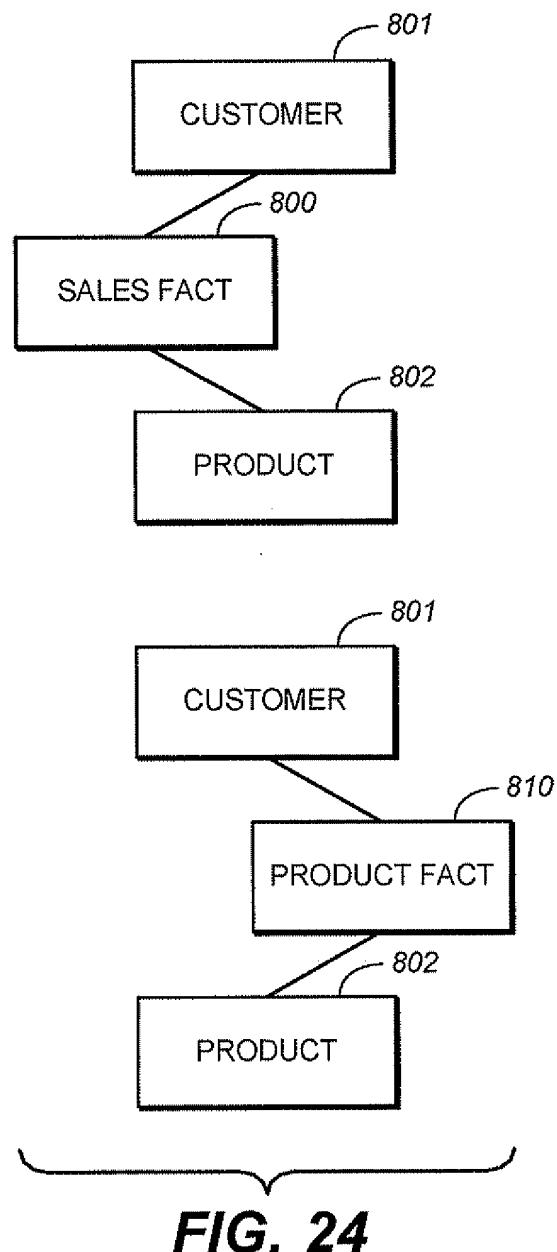


FIG. 23



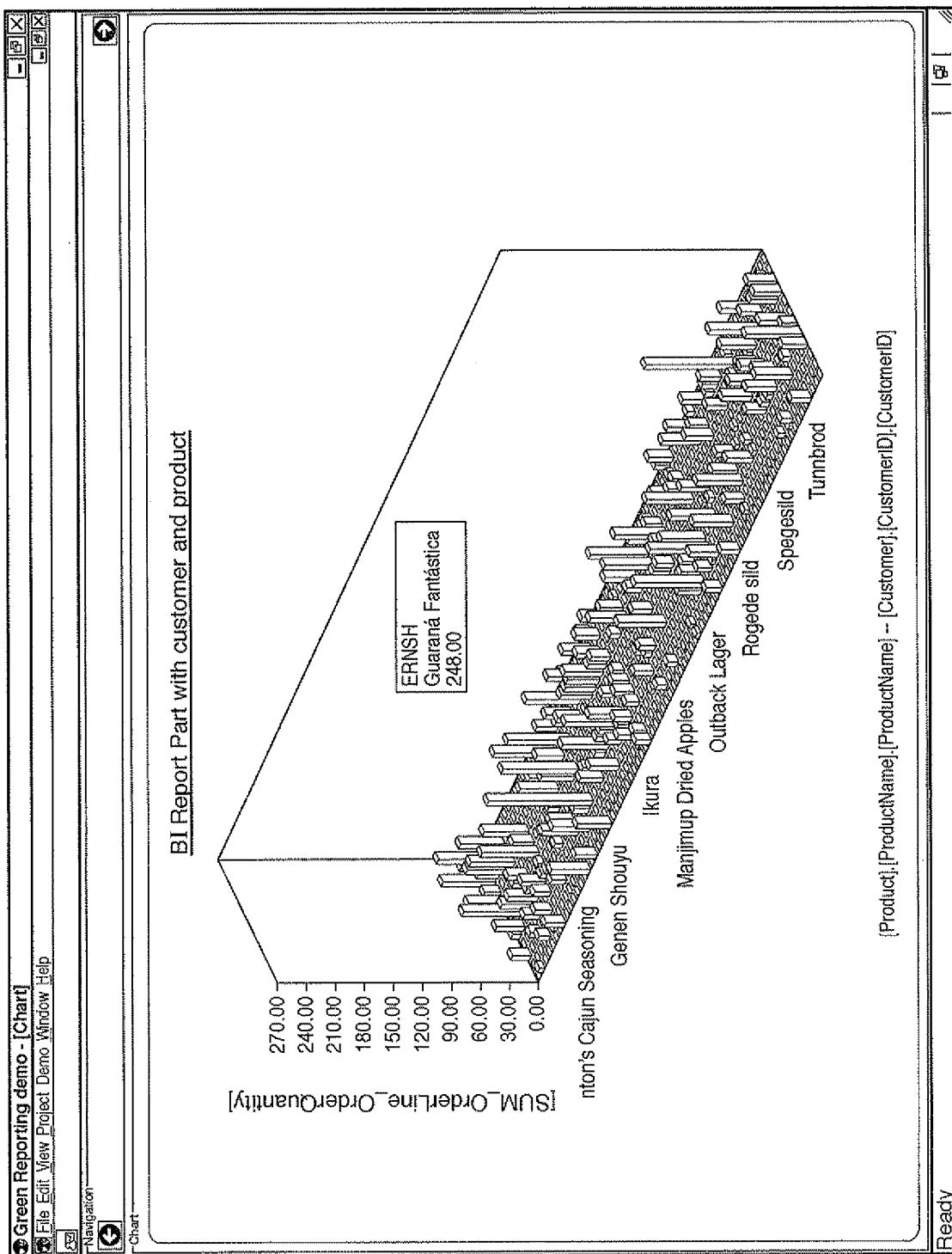


FIG. 25

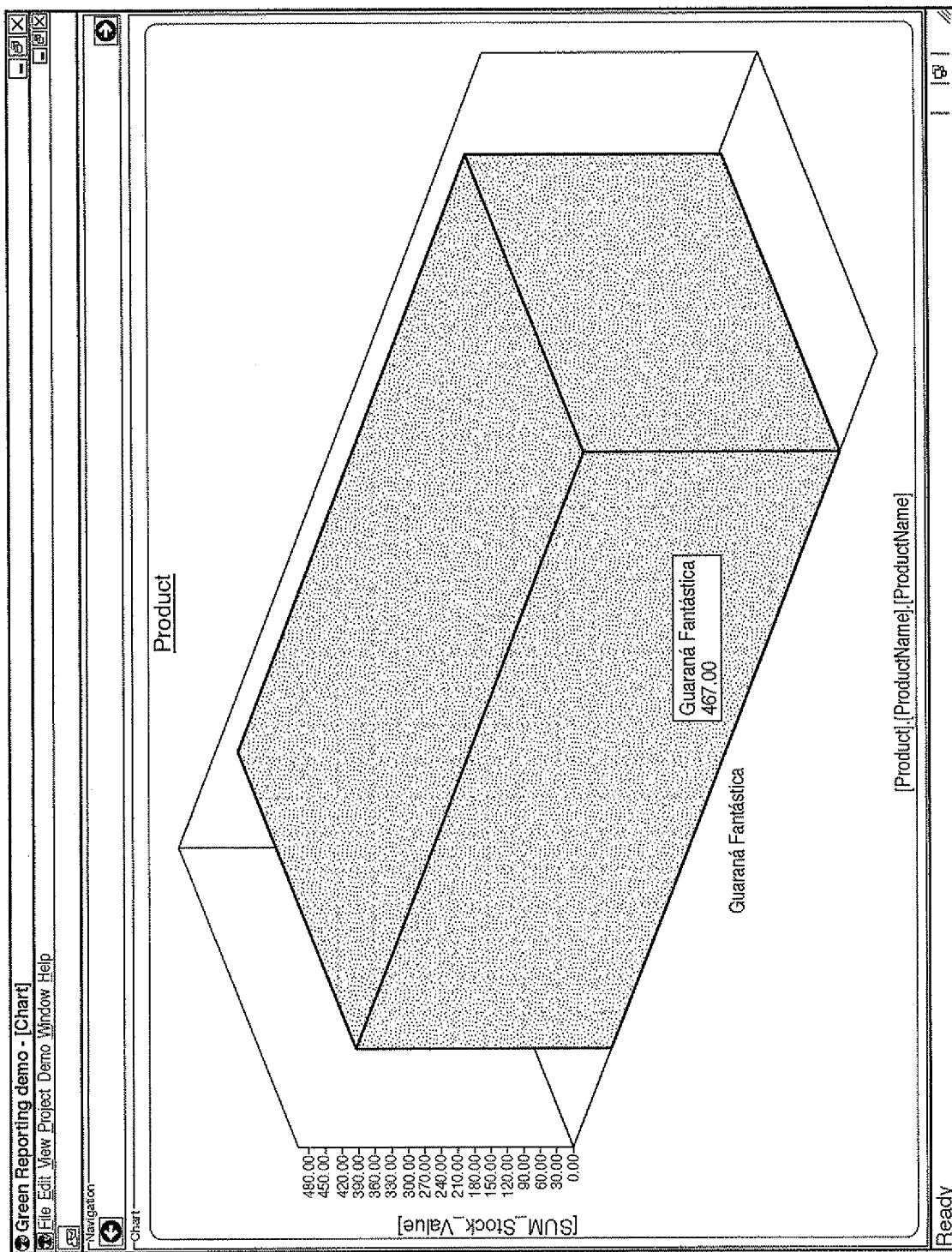
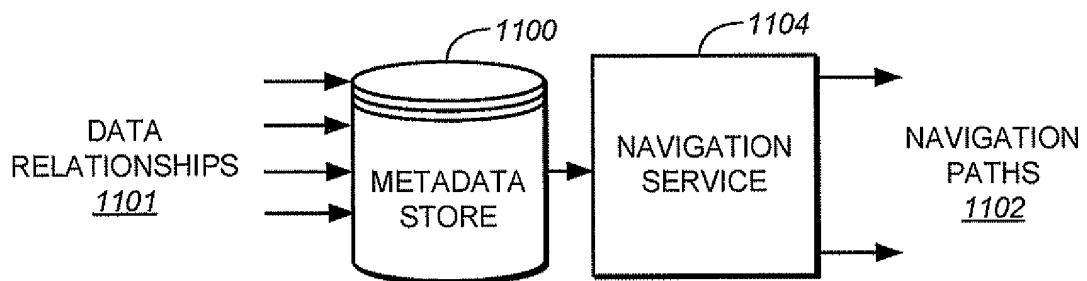
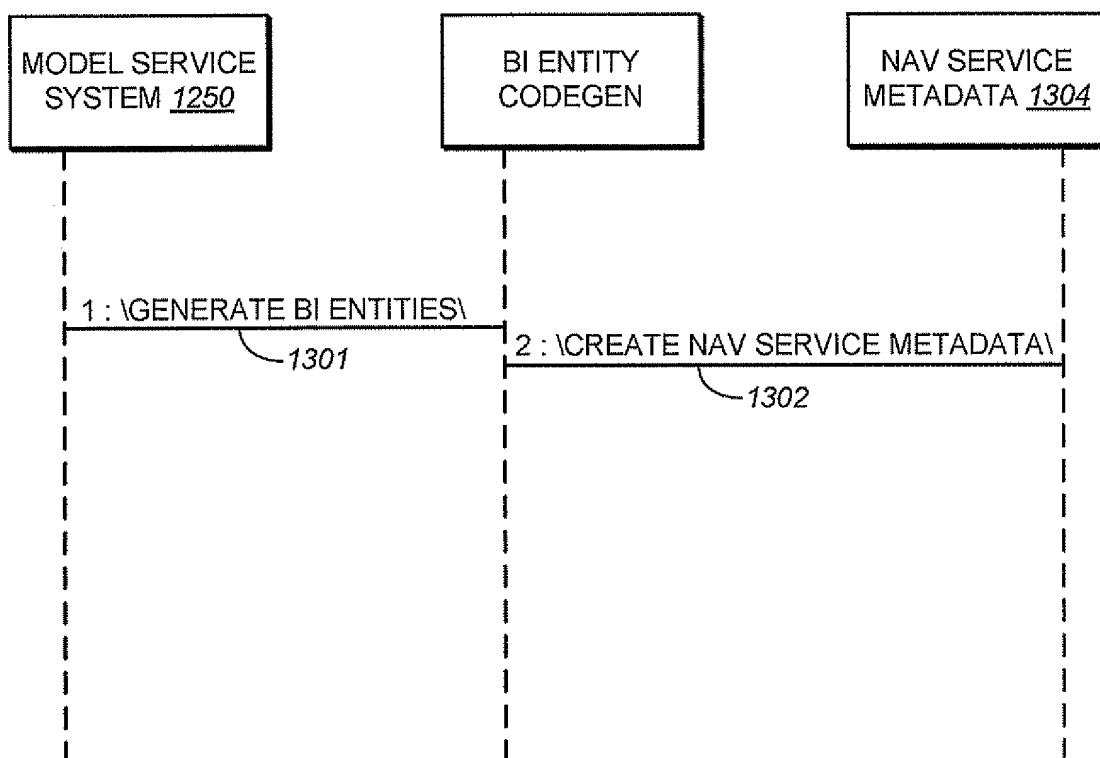
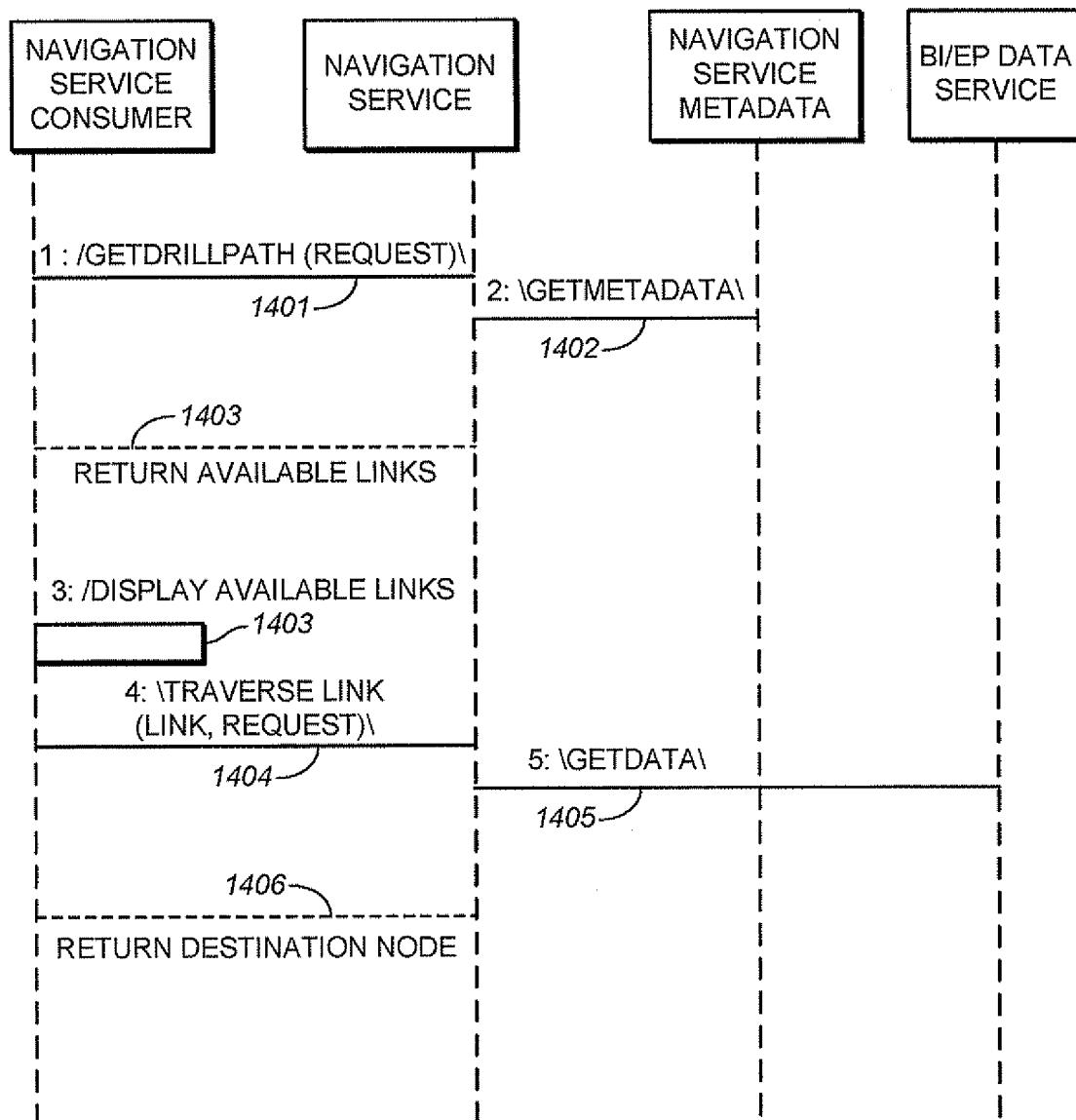


FIG. 26

**FIG. 27****FIG. 28**

**FIG. 29**

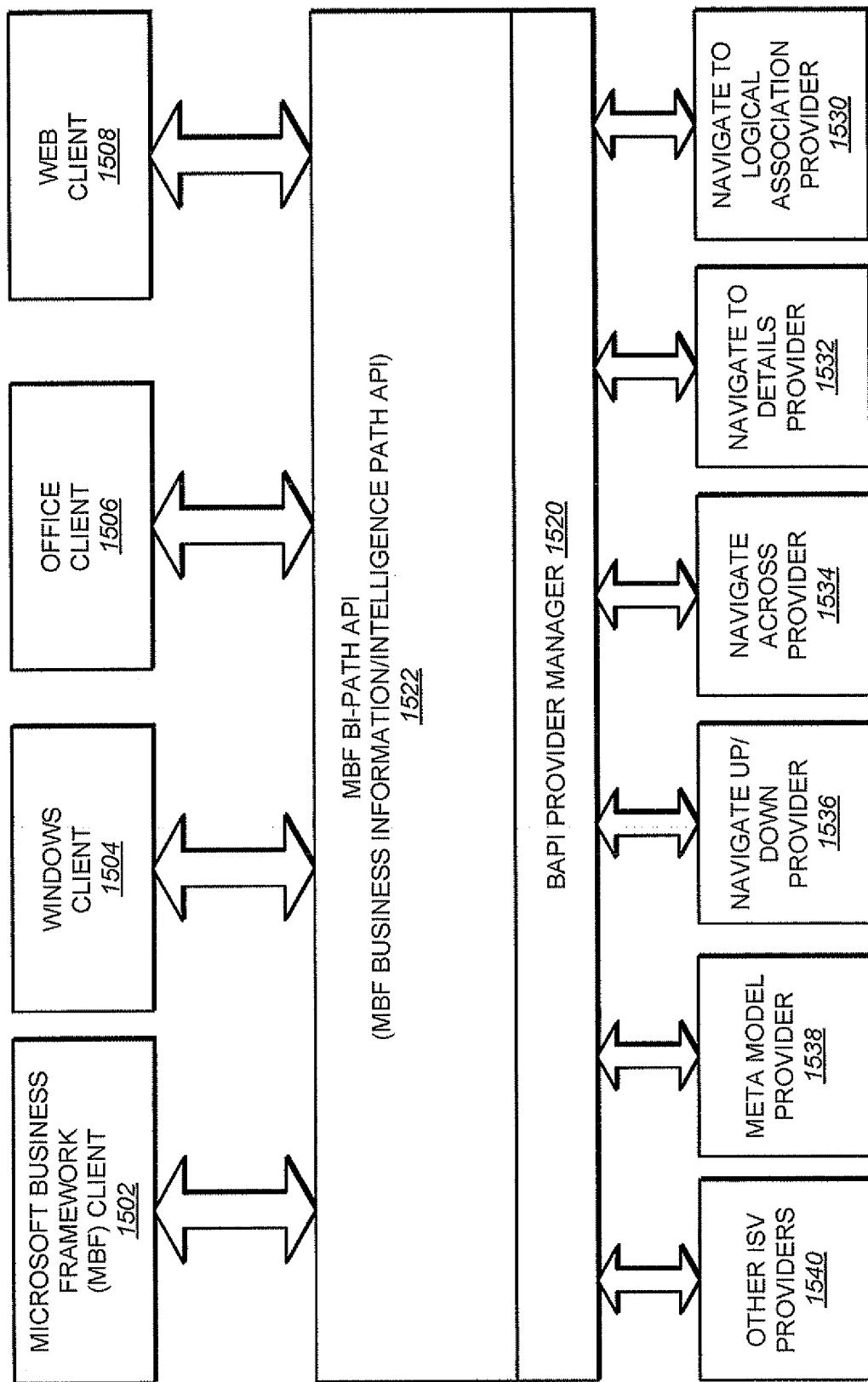
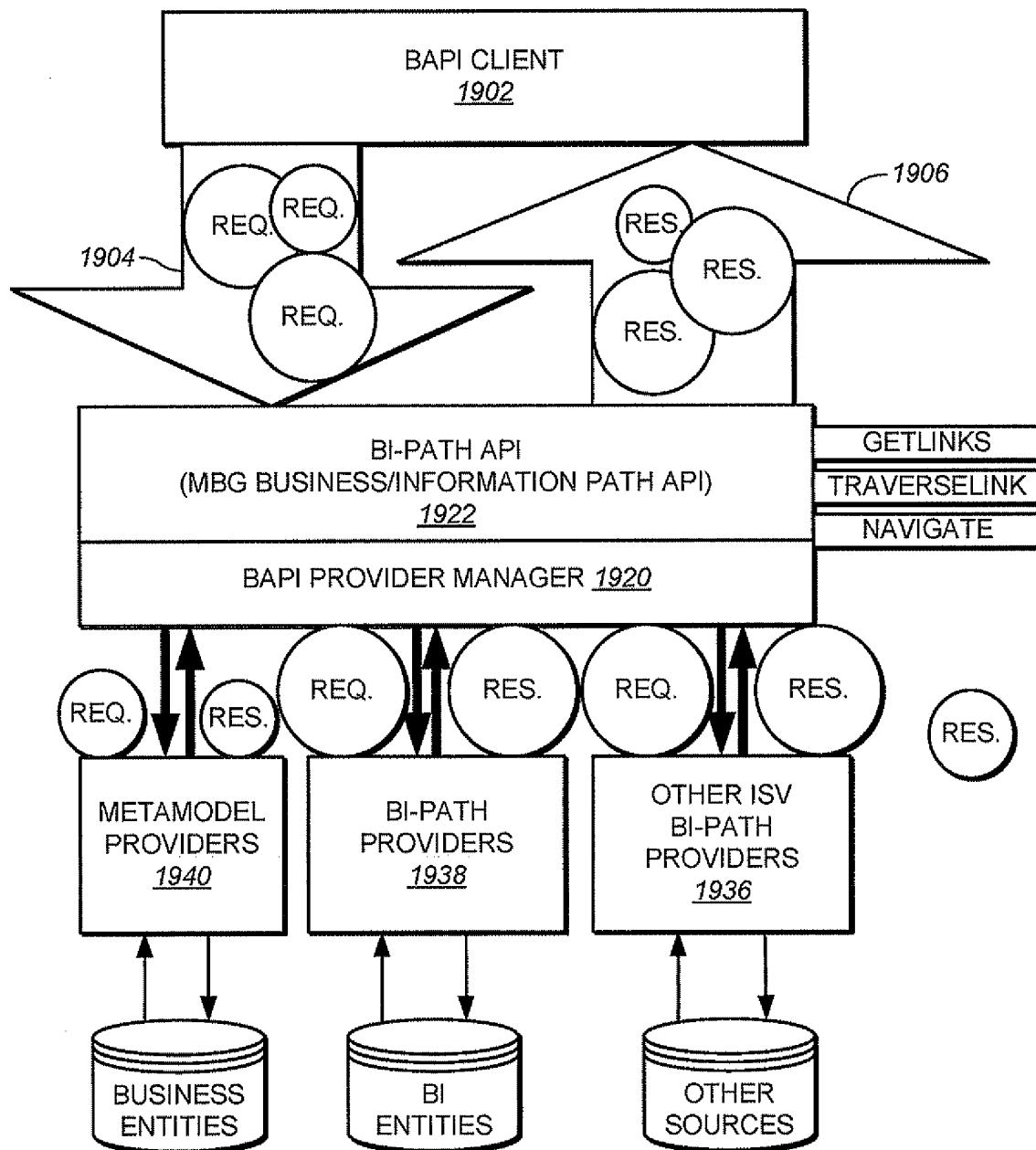


FIG. 30

**FIG. 31**

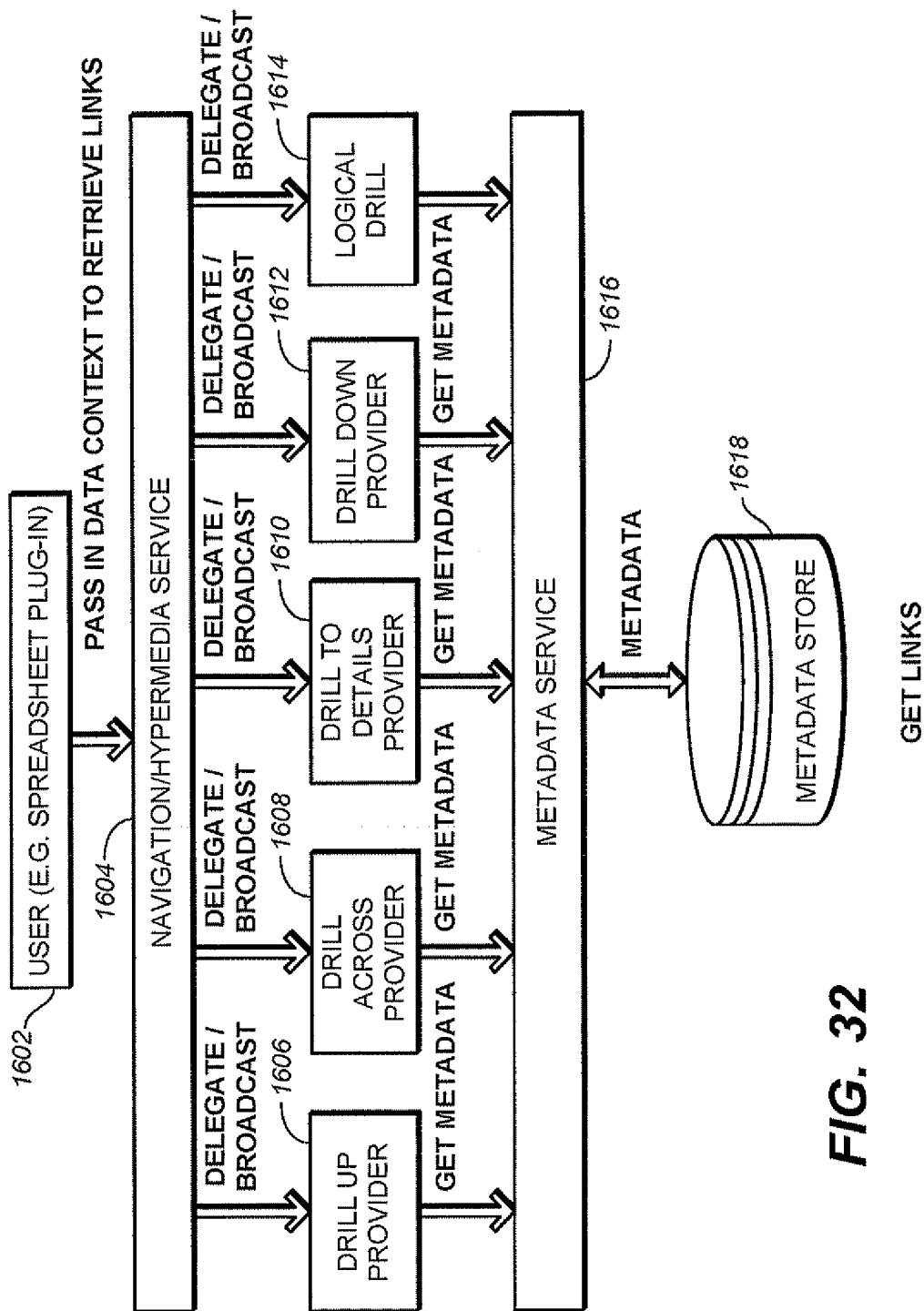
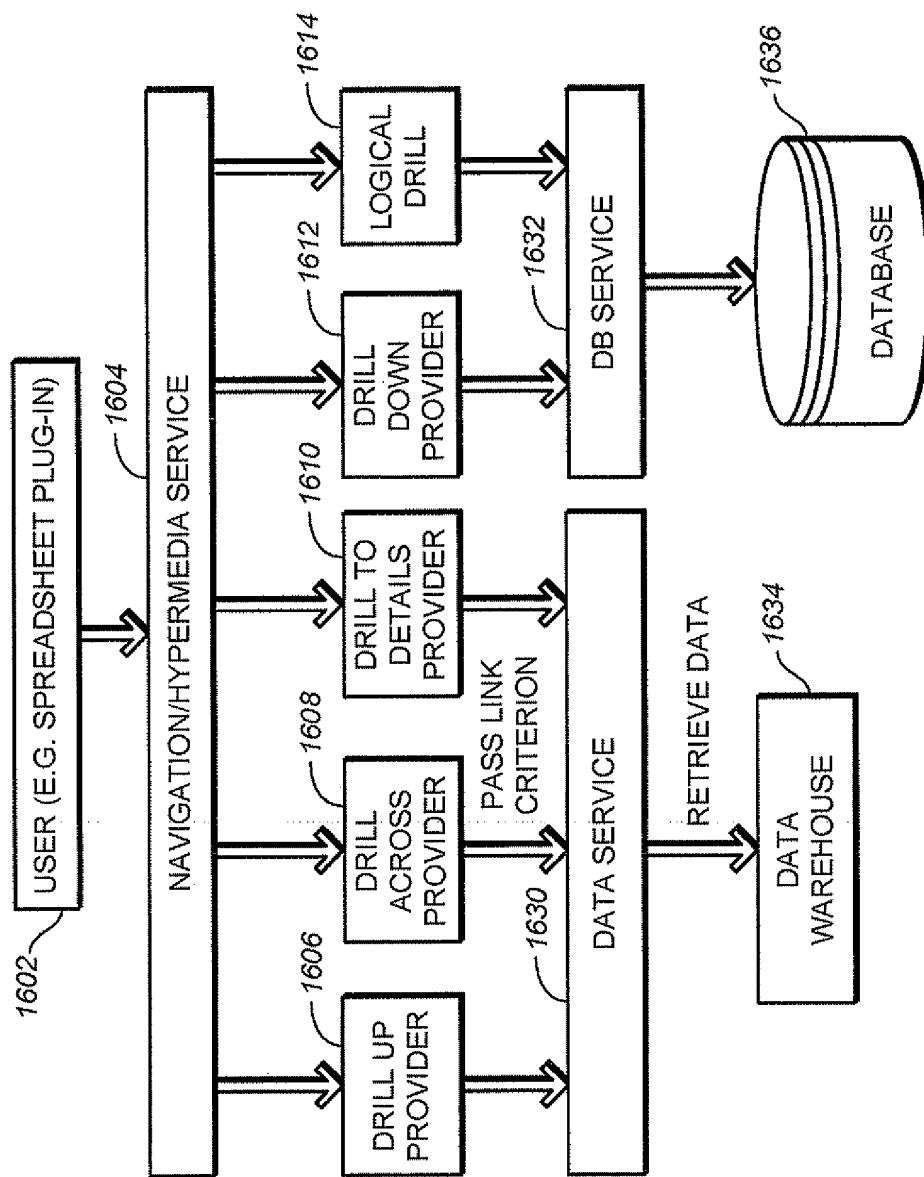


FIG. 32



TRAVERSE LINKS

FIG. 33

